

# ISCA ACADEMY



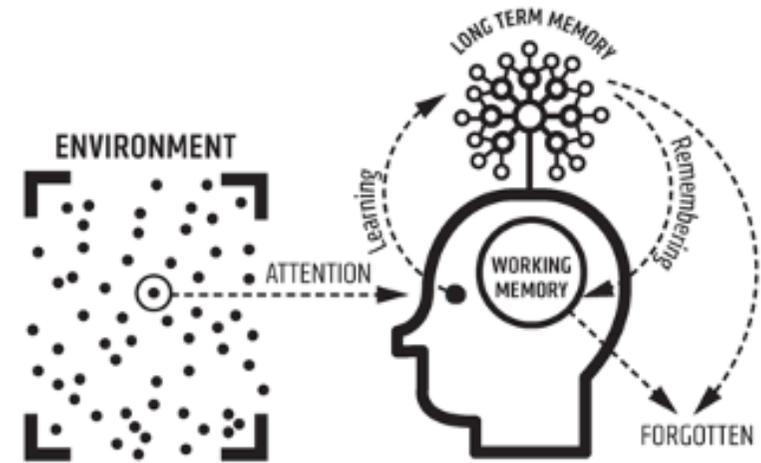
## KNOWLEDGE ORGANISER Summer 2021

## Year 7

# Improving your Long-Term Memory

## Memory

- Your memory is split into two parts; the working-memory and the long-term memory. Everybody's working-memory is limited, and can therefore become easily overwhelmed. Your long-term memory, on the other hand, is effectively limitless.
- You can support your working memory by storing key facts and processes in long-term memory. These facts and processes can then be **retrieved**, to stop your working memory becoming overloaded.
- Knowledge Organisers (KOs) are a key way to help you learn. Each KO has the key information that needs to be memorised to help you master your subject and be successful in lessons. We have also introduced a new section entitled '**Enquiry Tasks**' to ensure you are able to apply this new knowledge in a variety of contexts. These will not be set every week but teachers will direct students when to complete these.
- There is strong scientific evidence from cognitive psychology that shows the benefits of **self-quizzing** in promoting **retrieval strength**. This is your ability to quickly recall key facts related to your subject or topic.



Willingham Simple Model of Memory

## How should I self-quiz and how often?

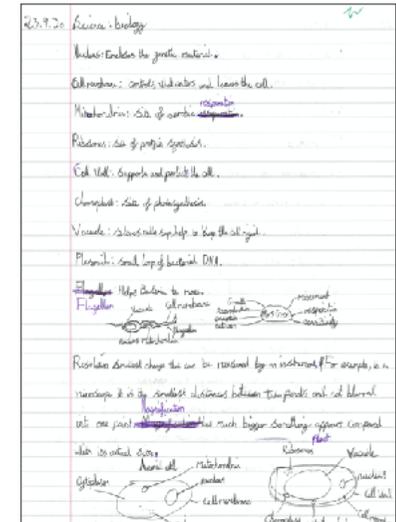
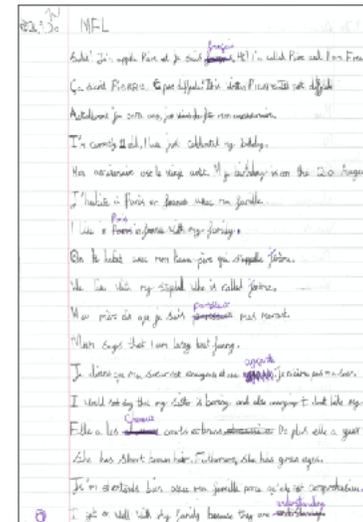
There are lots of different ways to **learn** the material in your knowledge organiser and the list below is not exhaustive. You could:

1. **Make flash cards** based on the knowledge organiser and ask someone to quiz you.
2. **Create a revision clock**. Draw a clock and add the topic in the middle. Break the clock face into 10 minute sections. Add notes from the knowledge organiser in each section. Cover the clock face and recite the information aloud.
3. Cover up one section of the knowledge organiser and try and write out as much as you can from memory (**Look, Cover, Write, Check**).
4. **Draw a mind map**, jotting down everything that you can remember from the knowledge organiser
5. Make up **mnemonics** to help you remember key facts, then write these out from memory  
i.e. **N**ever, **E**at, **S**hredded, **W**heat - to remember cardinal directions.

# Homework Expectations

## How should I present my work?

Please remember that the same rules apply to the presentation of your homework as apply for your class work: dates and titles (which should be the name of the subject) need to be underlined with a ruler and you should present your work as neatly as you are able to. We do not expect you to just copy work. If you are self-quizzing correctly, there should be evidence of purple pen on your page. Here are some examples of how to set out your work:



## Homework Schedule

You will be expected to have completed the homework on the day shown and your tutor will check it the following week. For example: On Mondays, you will be expected to show your completed English homework **from the previous week** in tutor time. Science will only be checked once a week, on a Wednesday.

	Subject	
Monday	English	
Tuesday	French / Spanish	Science (Tassomai)
Wednesday	History	Science (Tassomai)
Thursday	Geography	Science (Tassomai)
Friday	Mathematics (Sparx)	

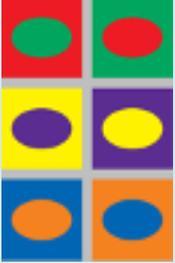
## How much work is expected?

- We expect you to spend between **20-30 minutes** per subject or **1 hour** on English and Maths.
- We expect you to complete at least **1 A4 page per subject, per night**. If however, you have spent the allotted time and not completed one page or if you have learnt the content in a different way (i.e. you have made flashcards), we would ask that you write a reflective sentence about what you have learnt and then get your parent / carer to sign the homework booklet so that your tutor knows that the work has been completed.

# ART and DESIGN

## Project 1: ME & MY WORLD – Architecture

Homework is optional. However, if you want to stretch and challenge yourself and really develop and improve your artistic skills, then complete these tasks. If you think you want to opt for GCSE art and design or GCSE photography, YOU MUST complete these tasks. Work on paper and bring your homework into school to present in your sketchbook.

Week 1&2: writing about an artwork	Week 3&4: copying an artwork	Week 5&6: my response
<p><b>Henri Matisse: The Dessert: Harmony in Red, 1908</b></p>  <p><b>Enquiry task 1:</b> Research this painting and write down what you find out about it</p> <p><b>Enquiry task 2:</b> Write an “I see, I think, I wonder” about this painting.</p> <p><b>Key Words</b></p> <p><b>Description:</b> a statement that gives factual details about an artwork.</p> <p><b>Research:</b> to investigate – to find out facts about an artist and/or artwork.</p>	<p><b>Enquiry task:</b> Copy “The Dessert: Harmony in Red”, image as accurately and confidently as you can.</p> <p><b>Optional enquiry task:</b> Take a photograph mimicking this painting OR find another painting by Matisse and copy it.</p> <p><b>Key Words</b></p> <p><b>Media:</b> the material and tools used by an artist or designer to create a work of art. I.e. “pen and ink”</p> <p><b>Technique:</b> how technical skills are used to create an artwork.</p> <p><b>Process:</b> the steps taken to create an artwork from start to finish.</p>	 <p><b>Enquiry task 1:</b> Take a selfie of you in your space</p> <p><b>Enquiry task 2:</b> Draw your photo. Title it “Me in my Space”</p> <p><b>Stretch and challenge:</b> develop your drawing using the same colour scheme as “Harmony in Red”.</p> <p><b>Key Words</b></p> <p><b>Response:</b> your creative reaction/idea – what you make in response to Matisse.</p>
Week 7&8: colour Theory	Week 9&10: making my masterpiece	Week 11&12: completing my masterpiece
 <p><b>Enquiry task:</b> Do a development of your drawing of “me in my space” from wk 5&amp;6 using your choice of complementary colours.</p> <p><b>Key Words</b></p> <p><b>Contrast:</b> means difference – i.e. the amount of difference between tones and colours.</p> <p><b>Complementary colours:</b> colours which appear opposite each other on the colour wheel – they have high intensity contrast.</p>	 <p><b>Enquiry task 1:</b> Draw out your “me and my space” drawing again and start to paint it using the techniques practiced at school.</p> <p><b>Enquiry task 2:</b> Review your masterpiece so far using “what went well” and “even better if” (<a href="http://www/ebi">www/ebi</a>).</p> <p><b>Key Words</b></p> <p><b>Refine:</b> to do something again to make it better</p> <p><b>Review:</b> to look at what works and what doesn't in order to improve/refine.</p>	 <p><b>Enquiry task 1:</b> Finish painting your final piece.</p> <p><b>Enquiry task 2:</b> Use colouring pencil to define the shapes and intensify the contrast of colours</p> <p><b>Key Words</b></p> <p><b>Define:</b> the degree of distinctness in outline of an image.</p> <p><b>Rendering:</b> adding colour, shading and texture to an image.</p> <p><b>Sustain:</b> to keep going until it is your very best work</p>

# Computer Science / Creative iMedia

Week 1 & 2 Introduction to Scratch	Week 3 & 4 Movement and Sprites	Week 5 & 6 Variables and constants
<p><b>Sprite</b> - A two-dimensional bitmap that is moveable and programmable.</p> <p><b>Stage</b> - Is the background you are displaying. This cannot move.</p> <p><b>Control Blocks</b> - Contain pauses, iteration and selection.</p> <p><b>Iteration</b> - Any repeat block, or forever. It is a loop.</p> <p><b>Selection</b> - Any IF statement block.</p>	 <p><b>X Axis</b> - Used in maths graphs. It controls the Sprites' ability to move left and right.</p> <p><b>Set X to</b> - Permanently fixes a sprite to that X value</p> <p><b>Y Axis</b> - Used in maths graphs. It controls the Sprites' ability to move up and down.</p> <p><b>Set Y to</b> - Permanently fixes a sprite to that Y value.</p>	<p><b>Variable</b> - A location of computer memory with a name which can be changed.</p> <p><b>Constant</b> - A location of computer memory with a name which cannot be changed.</p> <p><b>Index</b> - A number which denotes a location. For example index 1 would be the first item in a list.</p> <p><b>List</b> - A structured variable which can store multiple values with an index.</p> <p><b>Sequence</b> - A series of steps in a specific order to complete a task.</p>
<p><u>Enquiry Task:</u> Create a Scratch program which contains 2 sprites and 2 backgrounds, properly named.</p>	<p><u>Enquiry Task:</u> Build upon last week's task; allow both sprites to be moved using different keys.</p>	<p><u>Enquiry Task</u> Create a score system where the object of the game is to complete a simple maze within a time limit.</p>
Week 7/8	Week 9/10	Week 11/12
<p><b>Operators</b> - Mathematical functions such as add, minus, multiply or divide.</p>  <p>This symbol is greater than 50.</p> <p>This symbol is less than 50.</p> <p>This can be used to check if x is equal to 50.</p>	<p><b>Assessment Week</b></p> <p>This week the assessment will be on the keywords, and on the program you build in the lesson.</p> <p><b>Variable</b> - A location of computer memory with a name which can be changed.</p> <p><b>Constant</b> - A location of computer memory with a name which cannot be changed.</p>	<p><u>Improvement and time to review is really important.</u></p> <p>Please write a 300 word evaluation on your final product and include</p> <ul style="list-style-type: none"> <li>• What went well in your project</li> <li>• What did not go well</li> <li>• What skills you have learnt which you did not have before. Using Screenshots where possible</li> <li>• If you had more time on this how would you improve your Scratch Program?</li> </ul>
<p><u>Enquiry Task:</u> Extend your Scratch program to include a timeout feature when the timer runs out.</p>	<p><u>Enquiry Task:</u> Extend your Scratch program and add an additional level using the Broadcast feature</p>	

# Design and Technology

## Module 1 - Mr Donaldson

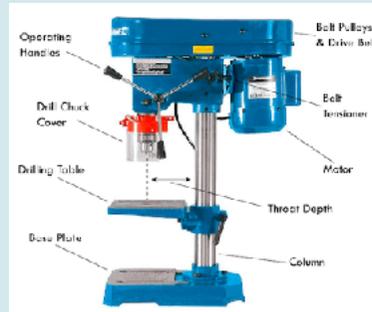
### Week 1 & 2 - Pillar Drill

Understanding the safe use of workshop machinery is important.

**ENQUIRY TASK** - draw a pillar drill in your workbook and label each part.

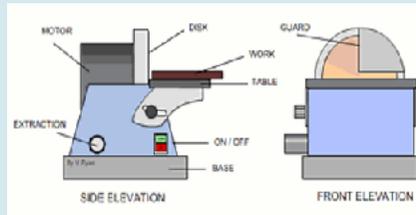
**Question** - List all the health & safety rules to consider when using the pillar drill.

**Keywords** - Chuck Key, Jacobs Chuck, Safety Guard, Adjustable Table.



### Week 3 & 4 - Sanding Machine

Understand how to use the machine correctly & safely. Recognise the correct height for the safety guard when operating the machine.



**ENQUIRY TASK** - Sketch the **Tower of Hanoi** project in your book and describe how the puzzle was made (step by step) and how the puzzle works.

### Week 5 & 6 - Manufactured Boards

**Plywood** - is an engineered wood made from multiple layers of thin veneer that are glued together. A **Dowel** - is a cylindrical rod, usually made from wood, plastic, or metal. **MDF** - Medium Density Fiberboard - is a manufactured board that is free from natural defects, it has a smooth sanded surface and precision finish.

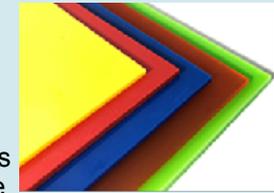
**ENQUIRY TASK** - Complete a PowerPoint showing examples of Manufactured Boards.

## Module 2 - Mr Donaldson

### Week 1 & 2 Plastics

**Thermoplastic** - is a material which becomes more soft when heated and hard when cooled (Example - Acrylic).

**Thermosetting plastic** - is a material which remains in a permanent solid state after being cured one time (Example - PVC).



**ENQUIRY TASK** - Complete a PowerPoint detailing different types of plastics. Logon to Focus eLearning.



### Week 3 & 4 - Working with Plastics

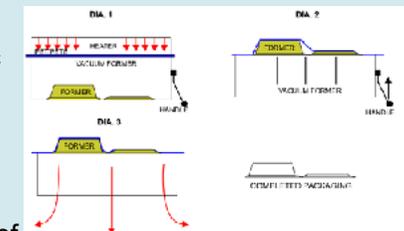
Filing - there are two different types of filing techniques. Draw filing & Cross filing.

Emery Paper - also known as wet & dry paper - should only be used on metals and plastics. Add water to emery paper as a final finishing process.

**ENQUIRY TASK** - Describe with the aid of sketches the technique of draw filing.

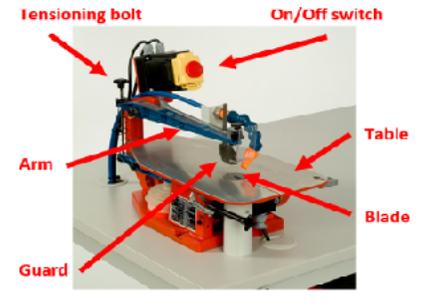
### Week 5 & 6 - Vacuum Forming

This is a process where a sheet of plastic is heated to a forming temperature, stretched onto a single-surface mould and forced against the mould by a vacuum.



**ENQUIRY TASK** - Describe with the aid of sketches the Vacuum Forming Process.

# Design and Technology

Module 3 - Mr Louis	Module 4 - Mr Louis
<p><b>Week 1 &amp; 2 - Health &amp; Safety</b> Working carefully and safely in the workshop.</p> <p><b>Do's -</b> Apron's on Long hair tied up Loose clothing tucked in Wear goggles when using machinery Bags and stools stacked away Listen to all instructions and demonstrations. Wear a face covering when moving around.</p> <p><b>Don'ts -</b> No messing around No running</p>  <p><b>ENQUIRY TASK</b> - Draw a sketch of a technology student, dressed correctly for a practical lesson. <b>Question</b> - What could happen if these rules are not followed. List as many examples as you can.</p>	<p><b>Week 1 &amp; 2 - Fret saw</b> - 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</b> - draw the fret saw in your workbook and label each part. <b>Question</b> - List the health &amp; safety rules to consider when using the fret saw.</p>
<p><b>Week 3 &amp; 4 - Measurements</b> A key part of designing &amp; making is being accurate with measuring. In D &amp; T we use the metric system as a unit of measurement.</p> <p><b>ENQUIRY TASK</b> - Using the Focus eLearning website, work through the Math's in Design Technology - <b>Metric Units of Measurement</b>.</p> <p><b>Question</b> - What do you understand by the phrase 'Measure twice, cut once'?</p>	<p><b>Week 3 &amp; 4 - Timbers</b> <b>Softwood</b> comes from coniferous trees Most coniferous trees have needles, are evergreen, and they keep their needles all year round. - Softwood trees grow faster than hardwood trees making it relatively cheap and readily available. The grain is wider making it more absorbent</p>  <p><b>ENQUIRY TASK</b>- Research which trees give us softwood and give examples for what the timber can be used for? <b>Question</b> - What problems could softwood absorbency cause with the timber?</p>
<p><b>Week 5 &amp; 6 - CAD/CAM</b> <b>CAD - Computer Aided Design</b> - Designing a product using computer drawing software, such as 2D Design. <b>CAM – Computer Aided Manufacture</b> - Using machines controlled by computers, to make products. Machines can be quicker, more accurate and safer. In school we use a laser cutter to cut acrylic.</p> <p><b>ENQUIRY TASK</b> - Research CAD/CAM, considering the benefits that can be gained through designing using computers and give an example of how it can be used. <b>Question</b> - Can you think of any disadvantages to using CAD/CAM when designing and making a product? Make a list of your answers.</p>	<p><b>Week 5 &amp; 6 - Timbers</b> <b>Hardwood</b> is sourced from deciduous trees - Deciduous trees drop their leaves in the autumn and new leaves grow in spring - Hardwood is usually slower growing and is therefore more expensive - Sought after for its variety of colours and grains, it has good aesthetical and physical properties - It has a closer grain, making it more dense and hard wearing.</p>  <p><b>ENQUIRY TASK</b> - Research which trees give us hardwood and give examples for what the timber can be used for. <b>Question</b> - Which hardwoods are grown sustainably in the UK?</p>

# Drama

<b>Week 1/2</b>	<b>Week 3/4</b>	<b>Week 5/6</b>
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Script: Written instructions for putting on a play.</li> <li>● Stage Directions: A description of when and where actors should move</li> <li>● Dialogue: The words characters speak to each other</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Characterization: Altering the way you move and sound to portray a different person.</li> <li>● Focus: Concentrating on staying in character and avoiding distractions</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Setting: The place where a scene happens.</li> <li>● Soundtrack: The music that accompanies the action on stage</li> <li>● Cross Cutting: A technique for highlighting action on different parts of the stage</li> </ul>
<p><u>Enquiry Task:</u> Read section 1; draw a diagram of the doctor's waiting room. Describe what you would get the actors to do at the start of the play if you were a director.</p>	<p><u>Enquiry Task:</u> Read section 2 What would you find most challenging about playing the officer? Describe and practice how you would move and talk as this character.</p>	<p><u>Enquiry Task</u> Read section 3: Describe how you would change the setting from the fairground to the boxing match. Think about how quickly it has to happen and how we have changed setting before.</p>
<b>Week 7/8</b>	<b>Week 9/10</b>	<b>Week 11/12</b>
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Tension: A feeling of suspense created by the actors.</li> <li>● Structure: The way a play is broken down into different sections.</li> <li>● Flashback: When action from the past is presented to the audience.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Rehearsal: Repeating a scene, making improvements each time.</li> <li>● Blocking: Working out where to stand and move throughout the play.</li> <li>● Cues: A line or action that is the signal for you to speak your line.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>● Performance: Sharing your work with an audience</li> <li>● Sustaining a role: Making sure that you move and speak in a consistent way that fits your character.</li> <li>● Reflection: Thinking about your strengths and weaknesses as a performer.</li> </ul>
<p><u>Enquiry Task:</u> Read section 4 Describe the moment when you think the tension is at its highest during this scene. Describe what you would do as an actor to help achieve this feeling of tension.</p>	<p><u>Enquiry Task:</u> Locate the script for the scene you are recreating on google classrooms. Learn the lines for your character. Practice Speaking your lines aloud without the script.</p>	<p><u>Enquiry Task:</u> Review your performance. Describe a new skill that you learnt. Explain what went well about your performance. Explain what you could do to be even more successful with future performances.</p>

# English

## War Poems

Week 1		Week 2		Week 3	
<b>Universal</b>	Existing everywhere and involving everyone.	<b>Harrowing</b>	Provoking feelings of fear or horror.	<b>Incessant</b>	Of something regarded as unpleasant – continuing without pause or interruption.
<b>Propaganda</b>	Information presented to persuade or influence an audience.	<b>Contrast</b>	An obvious difference between two or more things.	<b>Personification</b>	Applying human characteristics or features to something that is non-human.
<b>Tone</b>	The overall mood or feeling created by a text.	<b>Futile</b>	Incapable of producing any useful result; pointless.	<b>Essay</b>	A piece of writing where an opinion is explored or an argument is put forward.
<b>Poignant</b>	Suggesting a feeling of sadness or regret.	<b>Craft</b>	The knowledge or skills required to do an something.	<b>Analysis</b>	A detailed examination of how and why a writer's methods are used.
<b>Patriotism</b>	Love or pride in one's country.	<b>Premise</b>	An argument put forward about a text that serves as an introduction for an essay.		
<p><b>WW1 – 1914-1918:</b></p> <ul style="list-style-type: none"> <li>The war pitted the Central Powers—mainly Germany, Austria-Hungary, and Turkey—against the Allies—mainly France, Great Britain and Russia.</li> <li>At the time, it was the biggest war the world had ever known.</li> </ul> <p><b>Trench Warfare:</b></p> <ul style="list-style-type: none"> <li>Both sides dug long ditches on the battlefields known as 'trenches'</li> <li>Soldiers would live in these trenches for long periods of time</li> <li>Conditions in the trenches were extremely poor and soldiers suffered many threats to their health including harsh weather, disease, and unsanitary conditions.</li> <li>Soldiers would spend most of their time in the trenches doing nothing as they waited to attack or defend an oncoming attack.</li> </ul> <p><b>Enquiry Task:</b> Write a diary entry from perspective of a soldier fighting in trenches based on what you know about trench warfare.</p>		<p><b>Wilfred Owen</b></p> <ul style="list-style-type: none"> <li>A poet and soldier who fought in WW1.</li> <li>Died just before the war was over.</li> <li>Wrote most of his poems about the war.</li> <li>Owen used his poems to speak out against the death and destruction caused by war.</li> </ul> <p><b>Studying Literature</b> When we study a text, we are interested in two things:</p> <ol style="list-style-type: none"> <li>WHAT is the writer trying to achieve? (Purpose)</li> <li>HOW does the writer do this? (Methods/ Writer's Craft)</li> </ol> <p><b>Enquiry Task:</b> Write a description about a gas attack based on your knowledge of 'Dulce et Decorum est'</p>		<p><b>Ingredients of a Premise:</b></p> <ol style="list-style-type: none"> <li>Statement about writer's influences.</li> <li>Writer's last name followed by 'crafts.'</li> <li>Title of poem that's being written about.</li> <li>Explanation of what the writer is trying to achieve (big idea)</li> <li>Summary of poem.</li> </ol> <p><b>Enquiry Task:</b> Write a premise about 'Disabled'</p>	

# English

Week 4	Week 5	Week 6						
<table border="1" data-bbox="197 323 775 592"> <tr> <td><b>Evoke</b></td> <td>To make something remember something or feel an emotion.</td> </tr> <tr> <td><b>Irony</b></td> <td>A situation in which something is expected to have a particular result has the opposite or a very different result. The use of words that are the opposite of what they mean.</td> </tr> <tr> <td><b>Form</b></td> <td>The type or style of writing.</td> </tr> </table> <p><b>Exposure</b></p> <p>Owen uses personification to highlight the suffering caused by the soldier's exposure to the weather:</p> <p>'the merciless iced east winds that knife us'</p> <p>'mad gusts tugging on the wire'</p> <p>'Dawn massing in the east her melancholy army'</p> <p>'Flakes with fingering stealth come feeling for our faces'</p> <p><b>Enquiry Task:</b> Analyse Owen's use of personification by explaining how and why he has used it in each quotation above.</p>	<b>Evoke</b>	To make something remember something or feel an emotion.	<b>Irony</b>	A situation in which something is expected to have a particular result has the opposite or a very different result. The use of words that are the opposite of what they mean.	<b>Form</b>	The type or style of writing.	<p><b>Revision Tasks:</b></p> <ol style="list-style-type: none"> <li>1. Revise the vocabulary from the previous 4 weeks by writing out the words in a list. Cover up the definitions box and see how many words you can write the definitions for from memory.</li> <li>2. Fill in any gaps in purple pen.</li> <li>3. Revise the ingredients of a premise from week 3 by writing out the 5 ingredients without looking at them.</li> <li>4. Fill in any gaps in purple pen.</li> </ol> <p><b>Enquiry Task:</b> Write a premise about any of them poems you have studied in this unit.</p>	<p><b>William Shakespeare</b></p> <p>Shakespeare is the most influential British writer of all time.</p> <p>Shakespeare is most famous for writing plays.</p> <p>Shakespeare also wrote poetry.</p> <p>Most of his plays were written between 1590 and 1630.</p> <p><b>The importance of the play:</b></p> <ul style="list-style-type: none"> <li>• During the time when Shakespeare's plays were performed, plays were the only form of literature the average person was exposed to.</li> <li>• The average person could not read and had no access to any form from of storytelling outside of word of mouth and bible passages read to them by Priests.</li> </ul> <p><b>Enquiry Task:</b> Research the Globe Theatre and write a page about theatre in Shakespeare's day.</p>
<b>Evoke</b>	To make something remember something or feel an emotion.							
<b>Irony</b>	A situation in which something is expected to have a particular result has the opposite or a very different result. The use of words that are the opposite of what they mean.							
<b>Form</b>	The type or style of writing.							

# English

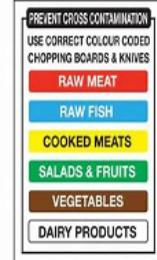
## The Merchant of Venice

Week 7	Week 8	Week 9
<p><b>Task 1 - Read this text</b></p> <p>Throughout history Jews have frequently been prevented from doing certain businesses or owning land – so few money making options were open to them. They were, however, allowed to lend money and charge interest on it, sometimes called usury. Christians were forbidden the charging of interest by the New Testament and thought of usury as sinful. Therefore many people thought Jews became rich through money lending, creating the impression that they were making money out of other people's debts / misfortunes.</p> <p><b>Task 2 - Answer the questions on the text above. Always answer in full sentences in your own words, using accurate SPaG</b></p> <ol style="list-style-type: none"><li>1. Why were there few money making options open to Jews?</li><li>2. What is usury?</li><li>3. What did the New Testament forbid Christians to do?</li><li>4. Why did some people think Jews were making money out of the misfortunes of others?</li></ol> <p><b>Enquiry Task 1:</b> Write a paragraph of your own about prejudice seen somewhere else in the world either through History or in the Modern Age.</p> <p><b>Enquiry Task 2 - Key Vocabulary</b> Use a dictionary to find the meanings of the words below.</p> <ul style="list-style-type: none"><li>• Prejudice</li><li>• Discrimination</li><li>• Patriarchal</li><li>• Anti-Semitism</li></ul>	<p><b>Enquiry Task 1</b> – Learn the spellings and definitions of the following words by using look, cover, write, check <i>at least</i> 3 times:</p> <ul style="list-style-type: none"><li>• <b>Intolerance</b> - unwillingness to accept views, beliefs, or behaviour that differ from one's own.</li><li>• <b>Hierarchy</b> = a system in which members of an organization or society are ranked according to relative status or authority.</li><li>• <b>Microcosm</b> = a community, place, or situation regarded as encapsulating in miniature the characteristics of something much larger.</li><li>• <b>Dominant</b> = having or exerting authority or influence.</li><li>• <b>Symbolism</b> = use of symbols to represent something beyond the literal meaning</li><li>• <b>Stereotypical</b> = relating to a widely held but fixed and oversimplified image or idea of a particular type of person or thing.</li></ul> <p><b>Enquiry Task 2</b> - In England, when Shakespeare was writing, Jews had been banished for the past 300 years. Shakespeare's audience would not have known any Jews; their knowledge of Jews would have been based solely on rumour and prejudice. They would have enjoyed the verbal insults and racist jokes against Shylock, and would probably not have questioned the treatment Shylock receives as we do today.</p> <p><b>Research and find the answer to this question.</b></p> <p><b>Why would Shakespeare's audiences not know any Jews?</b> Write your findings up in a clear paragraph in your own words.</p>	<p><b>Enquiry Task 1</b> – Learn this new quote by using look, cover, write, check at least 3 times:</p> <p><b><i>“If you prick us, do we not bleed? if you tickle us, do we not laugh? if you poison us, do we not die? and if you wrong us, shall we not revenge?”</i></b></p> <p><b>Enquiry Task 2</b> – Complete these sentences about the above quote</p> <ul style="list-style-type: none"><li>• The connotations of the word ‘bleed’ are...</li><li>• In this speech Shylock is showing Jews are...</li><li>• By using rhetorical questions, Shakespeare is showing Shylock...</li></ul> <p><b>Enquiry Task 3</b> – Find the definitions of the words below.</p> <p>Now learn the spellings and definitions of the words by using look, cover, write, check <i>at least</i> 3 times:</p> <ul style="list-style-type: none"><li>• Victimised</li><li>• Betrayal</li><li>• Monologue</li><li>• Epitomise</li><li>• Redeem</li><li>• Revenge</li></ul>

# English

Week 10	Week 11	Week 12
<p><b>Enquiry Task 1</b> - Write out these sentences, filling in the missing gaps with the words below:</p> <p>Merchant of Venice can be described as tragi comedy, as the play moves from potential tragedy to light _____. In keeping with the conventions of a comedy at the time, the play ends with the restoration of order, reconciliation and couples; but Antonio is left out, and the shadow of _____ is not far away.</p> <p>It could also be described as a type of revenge tragedy, but one where the tragedy is averted and the _____ seeker is not killed. One reading is that Shakespeare meant Shylock's <u>forced conversion</u> to _____ to be a "happy ending" for the character, as it 'redeems' Shylock both from his unbelief and his specific _____ of wanting to kill Antonio. This reading of the play would certainly fit with the _____ trends present in Elizabethan England.</p> <ul style="list-style-type: none"> <li>◆ Revenge</li> <li>◆ Shylock</li> <li>◆ anti-Semitic</li> <li>◆ Humour</li> <li>◆ sin</li> <li>◆ Christianity</li> </ul> <p><b>Enquiry Task 2</b> – In your opinion, who is the most interesting character in this play? Use these sentence starters to write a clear paragraph as your answer.</p> <ul style="list-style-type: none"> <li>- My favourite character in Merchant of Venice is... Because...</li> <li>- Something this character says which reinforces this is...</li> <li>- I would describe this character as...</li> <li>- The way Shakespeare has presented this character makes me understand....</li> </ul>	<p><b>Enquiry Task 1</b> - What is symbolism? Write down the definition in your Knowledge Organiser book.</p> <p><b>Enquiry Task 2</b> - Learn the following quotes from the play:</p> <p>“you call me a misbeliever, cut-throat dog, and spit upon my Jewish gabardine.” (Act 1 Scene 3 Shylock to Antonio)</p> <p>“If I can catch him once upon the hip, I will feed fat the ancient grudge I bear him.” (Act 1 Scene 3 Shylock to Antonio)</p> <p>“but since I am a dog, beware my fangs” Act 3 Scene 3 Shylock)</p> <p>“O, be thou damned, inexecrable dog,” (Gratiano to Shylock Act 5)</p> <p><b>Enquiry Task 3</b> - Write down the definition of the following words that we’ve studied so far this cycle:</p> <ul style="list-style-type: none"> <li>• Prejudice</li> <li>• Discrimination</li> <li>• Patriarchal</li> <li>• Anti-Semitism</li> <li>• Victimised</li> <li>• Betrayal</li> <li>• Monologue</li> </ul>	<p><b>Enquiry Task 1</b></p> <p>Write one Isca Way paragraph answering the following question:  <u>How does our opinion of Shylock change?</u></p> <p><b>At the beginning of the text, Shylock is presented as.....</b></p> <p><b>This is perhaps best illustrated /established / demonstrated when X describes/is described as “...”, suggesting /conveying / implying... In particular [Writer’s] use of [Method]”...” creates an IMAGE/TONE/MOOD/PATTERN/ ASSOCIATION/CONNOTATION...</b></p> <p><b>Additionally, this could also REPRESENT/ SYMBOLISE/EMBODY/JUXTAPOSE AGAINST...</b></p> <p><b>As a result the audience is led to think/feel/ realise/understand...</b></p> <p><b>As such, [writer] effectively attacks/critiques/ supports/reinforces...</b></p> <p>Use one of the quotes from your ‘Merchant of Venice Knowledge Organiser pages.</p>

# Food & Nutrition

Week 1 – Food Hygiene & Safety	Week 2 Procedures	Week 3 Nutrition
<p><b>Knife skills:</b> 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>Washing up</b></p> <ul style="list-style-type: none"> <li>• Tea towel</li> <li>• Dishcloth</li> <li>• Cleanest first</li> <li>• Oven gloves</li> </ul>  <p><b>Equipment</b></p> <ul style="list-style-type: none"> <li>• Knives – Chefs, paring (vegetable)</li> <li>• Grater</li> <li>• Chopping boards – Red &amp; Green</li> <li>• Saucepan</li> <li>• Wooden Spoon</li> <li>• Rolling Pin</li> </ul> <p><b>ENQUIRY TASK 1: Identify 1 hygiene and 1 safety rule to follow for your practicals.</b></p>	<p><b>FRUIT AND VEGETABLES</b> – 5 portions a day. A portion is a hand full. Vitamins, Minerals and Fibre. Vitamins and Minerals do all sorts of jobs in the body. Fibre is needed to aid digestion. <b>BREAD, POTATOES, RICE AND PASTA</b> Carbohydrate Starch. Starch provides slow release energy.</p> <p><b>Practical Skills:</b> Peel, slice, dice, rubbing in method Enzyme browning – apple Baking</p> <p><b>Calories:</b> Men 2,500, Women 2,000 per day</p> 
Week 4	Week 5	Week 6
<p><b>BEANS, PULSES, EGGS, FISH AND MEAT</b> Protein is needed for growth and repair of all the cells in the body</p> <p><b>DAIRY AND ALTERNATIVES.</b> Calcium is needed for strong teeth and bones. Dairy products can also be high in the nutrient Fat</p> <p><b>OILS AND SPREADS</b> - Fat - warmth/energy <b>WATER</b> - Rehydrates us. We need 6-8 glasses a day.</p> <p><b>Practical Skills:</b> Grill, slice, cross contamination, grate, bake</p> <p><b>ENQUIRY TASK 2: Explain what nutrients are in Pizza and what they do in the body</b></p>	<p><b>Meat – Farm to Fork (traceability)</b> Meat comes from animals that are reared on farms. Meat is slaughtered and processed. We can buy meat in many different cuts.</p> <p><b>MILK and CHEESE</b> Most of our milk comes from cows. There are 3 main types of milk – Whole, skimmed and semi-skimmed. Milk can be processed to make cheese and yoghurt.</p> <p><b>Practical Skills:</b> High risk – cross contamination, using a probe, pane, slice, bake.</p>	<p><b>Types of Diets</b> <b>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 diet Too much Sugar – Dental caries/diabetes Lack of vitamin C – Scurvy Lack of Calcium – rickets/osteoporosis</p> <p><b>Practical skills:</b> peel, slice, dice, fry, boil, simmer</p> <p><b>ENQUIRY TASK 3: Explain how you could adapt spaghetti bolognese to make it vegetarian.</b></p>

# French

Cycle 3 – Le temps libre (Free Time)			
WEEK	French	English	Enquiry Tasks – to be done in French
1	Pour moi, le temps libre est essentiel.	For me, free time is essential.	Research the most popular sports in French speaking countries.
2	En ce qui concerne les sports, le lundi je joue au basket mais mon frère joue au football.	With regards to sports, on Mondays I play basketball, but my brother plays football.	Make a list of all the time phrases you know in French, including days and months,
3	Tous les jours avant d'aller au collège je fais du vélo, cependant, je ne fais jamais de l'équitation.	Every day before going to school I do cycling however I never do horse riding.	Make flashcards for the verbs Jouer and Faire in the present tense.
4	Le week-end j'aime regarder la télé mais le week-end prochain j'aimerais sortir avec mon copain.	At the weekend I like to watch TV but next weekend I would like to go out with my friend.	Write a paragraph in French to say what you like to do. Give reasons for your opinions.
5	Quand il fait beau j'adore aller à la plage pour faire de la natation mais s'il pleut je reste à la maison.	When the weather is nice I love to go to the beach to do swimming but if it's raining I stay at home.	Use this week's structure to write a list of 6 things you like to do in different weather.
6	Je dirais que faire de la natation est plus passionnant que faire les devoirs.	I would say that doing swimming is more exciting than doing homework.	Cover the French for weeks 1-6. Practice saying it out loud. Can you recall the whole text?
7	Le week-end dernier je suis allé en ville avec ma soeur et j'ai mangé au restau qui s'appelle Nando's.	Last weekend I went to town with my sister and I ate in the restaurant which is called Nando's.	Use the past tense to list 5 things you did last weekend.
8	C'était nul parce qu'il faisait mauvais et il y avait de l'orage.	It was awful because the weather was bad and there was a storm.	Adapt 5 of the 10 key sentences to write about your free time.
9	La semaine prochaine, s'il fait chaud, je veux aller à la piscine. Ça serait chouette.	Next week, if it is hot, I want to go to the swimming pool. It would be great.	Use the immediate future tense to list 5 things you are going to do next weekend.
10	Et toi? Qu'est-ce que tu aimes faire pendant ton temps libre?	And you? What do you like to do in your free time?	Imagine you are interviewing a French athlete. Write 10 questions in French to ask them.
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 3 Weeks 1-10.

# French

Week 1 – Francophonie		Week 2 – Sports		Week 3 - Hobbies		Week 4 Infinitive structures		Week 5 - Weather	
Algérie	Algeria	jouer	to play	faire	to do / make	J'aime	I like	Quand	When
Belgique	Belgium	je joue	I play	je fais	I do	J'adore	I love	Si	If
Cameroun	Cameroon	tu joues	You play (s)	tu fais	you do (s)	Je préfère	I prefer	il fait beau	It's nice
Côte d'Ivoire	Ivory Coast	il /elle joue	he/she plays	il / elle fait	he/she does	Je n'aime pas	I don't like	il fait mauvais	It's bad
France	France	nous jouons	we play	nous faisons	we do	Je déteste	I hate	il fait du soleil	It's sunny
Guadeloupe	Guadeloupe	vous jouez	you play (pl)	vous faites	you do (pl)	Je vais...	I am going	il fait du vent	It's windy
Guinée	Guinea	ils jouent	they play	ils font	they do	Nous allons	We are going	il fait du brouillard	It's foggy
Haïti	Haiti	au basket	basketball	de l'athlétisme	athletics	Je veux	I want	il neige	It's snowing
Luxembourg	Luxembourg	au foot	football	du vélo	cycling	J'aimerais	I would like	il pleut	It's raining
Madagascar	Madagascar	au tennis	tennis	de l'équitation	horse riding	All the verb phrases above can be followed with an <b>infinitive</b> clause (below) to create more complex structures.		c'est nuageux	It's cloudy
Mali	Mali	au volley	volleyball	du ski	skiing			il fait chaud	It's hot
Maroc	Morocco	aux boules	bowls	de la natation	swimming			il fait froid	It's cold
Québec	Quebec (Canada)	au babyfoot	table football	du patinage	skating	faire du shopping	to go shopping	il y a de l'orage	There's a storm
		le week-end	at the weekend	souvent	often	jouer au foot	to play football	<b>Quand</b> and <b>si</b> can be used to link two clauses together and create more complex structures.	
Sénégal	Senegal	le matin	in the morning	quelquefois	sometimes				
Suisse	Switzerland	l'après-midi	In the afternoon	une fois par semaine	once a week	écouter de la musique	to listen to music	S'il fait beau, je joue au tennis.	If it's nice, I play tennis.
Tunisie	Tunisia	la nuit	at night	deux fois par mois	twice a month				
Vietnam	Vietnam	le jeudi	on Thursdays	tous les jours	every day	sortir avec des copains	To go out with friends		
French is the official language of 29 countries and in all French overseas regions and territories. About 300 million people speak French.		dimanche	on Sunday	jamais	never				
		avant de manger	before eating						
<b>KEY:</b>	<b>verbs</b>	<b>masculine nouns</b>		<b>feminine nouns</b>		<b>adjectives</b>		<b>connectives</b>	

# French

Week 6 – Time		Week 7 – Last Weekend		Week 8 – Perfect tense			Week 9 – Making plans		Week 10	
À quelle heure?	At what time?	la semaine dernière	last week	j'ai joué	I played		Tu veux...?	Do you want?	Revise the key sentences and all vocabulary from this cycle ready for your assessment next week.  <b>Quizlet folder:</b>  	
à midi	at midday	il y a deux jours	two days ago	tu as joué	you played		À quelle heure?	At what time?		
à minuit	at midnight	hier soir	last night	il a joué	he played		Quand?	When?		
à une heure	at 1 o'clock	hier	yesterday	nous avons joué	we played		lundi	Monday		
à deux heures cinq	at five past two	c'était	it was	vous avez joué	you played (pl)		à huit heures	at 8 o'clock		
à trois heures dix	at ten past three	il faisait	it was (weather)	ils ont joué	they played		demain	tomorrow		
à quatre heures et quart	at quarter past four	il y avait	there was	The perfect tense is one way to talk about the past. To conjugate it you need the pronoun, present tense of the verb Avoir (to have) + a past participle.			le week-end prochain	next weekend		
à six heures vingt	at twenty past six	j'ai écouté de la musique	I listened to music				la semaine prochaine	next week		
à sept heures trente	at seven thirty	j'ai regardé la télé	I watched TV	I	(have)	played	Je vais	I am going		<b>Week 11</b>
à huit heures moins vingt cinq	at 8.35 / twenty five to nine	j'ai mangé	I ate	J'	ai	joué	Je ne veux pas	I don't want to		Assessment Week
à onze heures moins cinq	at five to eleven	j'ai joué	I played	She	(has)	eaten	Je ne peux pas	I can't		
		j'ai fait	I did / made	Elle	a	mangé	Je ne peux pas	I can't	<b>Week 12</b>  Teacher set homework based on knowledge gaps identified in assessments.	
		je suis sorti(e)	I went out	We	(have)	played	ça serait	It would be		
		je suis allé(e) en ville	I went to town	Nous	avons	joué	oui / non	yes / no		
		j'ai bu	I drank	They	(have)	eaten	d'accord	ok		
				Ils	ont	mangé	bien sûr	of course		

# Geography

## Fieldwork and Tectonics

### Week 1

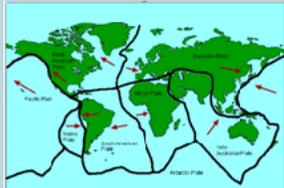
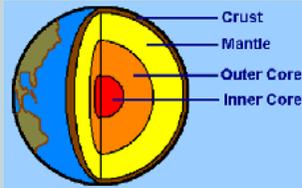
#### The structure of the Earth

**Crust** – the surface of the Earth, where we live.

**Mantle** – the thick layer of the Earth under the crust.

**Outer Core** – layer surrounding the inner core.

**Inner Core** – the area at the centre of the Earth. The Inner Core is the hottest part of the Earth.



**Tectonic Plates** The Earth's crust is not one, solid mass. It is like a jigsaw puzzle, made up of big pieces called tectonic plates. These plates move around. They can collide (bump into each other) to form mountains, they can subduct (one plate sinks under another), or they can slide past each other.

**Enquiry:** Create a fact file about the tectonic plates. Find out the sizes of the plates, how fast they are moving and describe how they have moved over time.

### Week 2

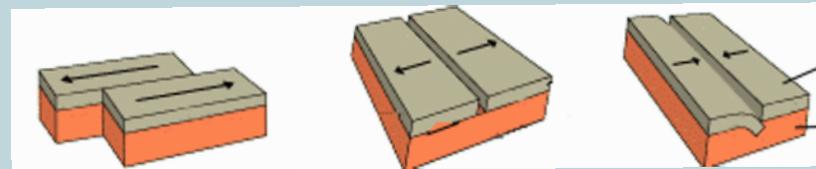
**Tectonic plate boundaries** Tectonic plates meet at a boundary (edge). There are three main types of tectonic plate boundary:

**Conservative/Transform boundaries** - the plates slide past each other.

**Divergent boundaries** – the plates are moving away from each other.

**Convergent boundaries** – the plates are moving towards each other.

Earthquakes - all boundaries. Volcanoes - not at conservative boundaries.



**Enquiry:** Locate examples of places on the Earth where you find each of the three types of plate boundaries. Write a detailed paragraph about each one.

### Week 3

**Earthquakes** An earthquake is the shaking of the surface of the Earth. Earthquakes most often occur close the boundaries (edges) of tectonic plates as the plates do not slide smoothly past each other, or because they are dividing/colliding.



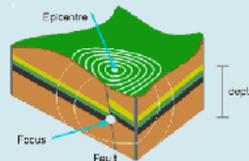
What is the Richter scale?					
0-2.0	2.1-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9
Not measured, not felt	Light shaking of items, little damage, if any	Measured, but not felt	Slight structural damage possible	Potential for destructive tremors	Extreme destruction
			Devastating damage over huge areas		

SOURCES: U.S. Geological Survey

The magnitude (power) of an earthquake is assessed using the Richter Scale. Earthquakes release seismic waves and these are measured by seismologists (earthquake scientists), using a machine called a seismograph.

The place in the Earth's crust where an earthquake originates is called the focus. The point on the surface directly above the focus is the epicentre.

**Enquiry:** Create a map of UK earthquakes in 2019.



### Week 4



**Haiti Earthquake** Haiti is a small nation in the Caribbean Sea. It is a poor country and in 2010, Haiti was hit by an earthquake measuring 7.0 on the Richter Scale. Over 220,000 people died, 300,000 people were injured, 1.3 million people were made homeless, buildings collapsed and many people were left without food or water.

**Primary effects:** the direct impacts of a natural disaster such as the ground shaking in the case of an earthquake. These can cause many deaths/injuries.

**Secondary effects:** occur as a result of the primary effects, such as collapsing buildings because of the ground shaking. These effects can be long-lasting.

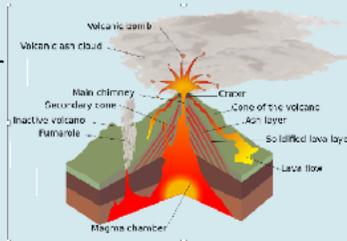
**Enquiry:** Write a newspaper report describing the Haiti earthquake. Note the secondary effects of the disaster and how these impacted the people of this LIC (Low Income Country). Say how the people are doing now, ten years on.



# Geography

## Week 5

**Volcanoes** A volcano is a vent/fissure in the Earth's crust through which lava, rock, ash and gasses erupt. The build-up of these materials over time often forms a mountain, which is also known as a volcano.



**Magma** – molten rock within the Earth.  
**Lava** – molten rock on the Earth's surface.  
**Rock** – large, solid pieces of the Earth's crust.

**Ash** – fine, small, solid pieces of the Earth's crust.  
**Gas** – invisible particles such as sulphur dioxide which erupt from the volcano.

**Enquiry:** Research and then describe the distribution (spread) of volcanoes across the world. Say whether you can see any patterns to their locations. Remember to think like a geographer and use compass points and the names of continents to locate chains of volcanoes.



## Week 6

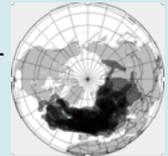
**Eyjafjallajokull volcano eruption** - (pronounced Eye-yaf-yalla-yokool).



The Eyjafjallajokull volcano is situated in southern Iceland and erupted in 2010. Iceland is a small, remote, island nation located in the North Atlantic Ocean. It is a HIC (High Income Country) which has many volcanoes and geysers.

The eruption did not result in any deaths but did produce a very large cloud of ash. This ash plume contained large amounts of tiny particles of hard volcanic rock. It rose 9km into the atmosphere and covered large areas of N Europe.

The ash poisoned farm animals and people across Iceland had to remain indoors. The ash plume spread across Europe, causing air flights to be cancelled. People could not go to work and perishable foods were wasted. Businesses and air operators lost millions of pounds daily for over two months.



**Enquiry:** Create a map showing the extent of the ash cloud.

## Week 7

**Predicting earthquakes and volcanic eruptions**

Seismologists are earthquake scientists who try to predict earthquakes. Volcanologists are volcano scientists who are skilled at predicting the chances of an eruption. Though it is very hard to find out exactly when a volcano will erupt as magma often moves underground but this does not always cause an eruption to take place.

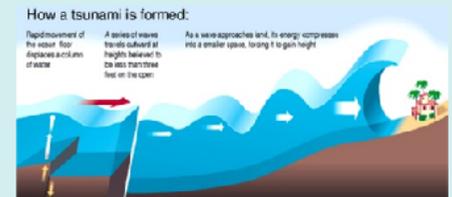
The scientists use many instruments to try to predict earthquakes and volcanic eruptions, including seismographs, tilt meters, gas monitors, thermal imaging and global positioning systems (GPS). The data from these is used to help authorities to plan so they can protect people, buildings and the environment.

**Enquiry:** Choose five instruments that are used to study earthquakes and create a table to list these. Then add a section to give a description of each piece of equipment and another to give details of how each instrument is used.

Option:	If Quake:	If No Quake:
<b>Alarm</b>	Great losses, mitigated by preparations (cost of alarm incidental).	<b>False alarm:</b> cost of alarm, panic and economic disruption. Multiple instances? <i>but increases the cost of false alarms.</i>
<b>No Alarm</b>	Great losses, worsened by being caught off-guard.	Normal: no losses, no disruption, no cost of alarm.

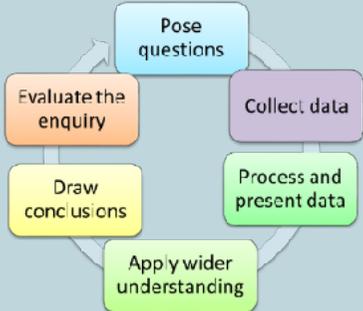
## Week 8

**Tsunami** – giant, waves often caused by earthquakes/eruptions under the sea. An earthquake occurring under the sea may not cause much damage but the shaking of the sea floor can cause a build-up of giant waves. These waves become extremely dangerous when they reach land as they can grow very large and powerful. They can easily destroy buildings and carry large items such as cars and trees, causing more damage.



**Enquiry:** Read the article and watch the videos: <https://www.bbc.co.uk/news/world-europe-54749509> about an earthquake and tsunami which affected Greece and Turkey in 2020. Write four paragraphs to summarise the main facts about this disaster. Include details of the damage caused by the tsunami in your writing.

# Geography

Week 9	Week 10
<p><b>Key terminology</b></p> <p><b>Fieldwork</b> – a practical enquiry conducted by a researcher in the natural or human environment, to prove/disprove a hypothesis.</p> <p><b>Hypothesis</b> - a statement to be tested and proved true or false.</p> <p><b>Sample size</b> - the amount of data collected in a fieldwork enquiry.</p> <p><b>Primary data</b> - data that you have collected yourself first-hand.</p> <p><b>Secondary data</b> - data that has been collected by someone else e.g. internet.</p>  <p><b>Pose Questions</b> A fieldwork enquiry is set up to try to test a hypothesis. The hypothesis is created by posing questions before an enquiry begins and are important in ensuring that fieldwork enquiries are meaningful and achievable.</p>  <p>Hypotheses can then be set up and tested, though a clear answer may not be found from the fieldwork data. This means that a judgement will need to be made based on the evidence, whether the hypothesis has been proved correct.</p> <p><b>Enquiry:</b> Create an enquiry question for a fieldwork project you would like to undertake in an area close to your home (for example, your road or street). Then design a hypothesis and explain how you would collect data to test it.</p>	<p><b>Collect data</b> How much data (sample size) and which data should be collected needs to be planned before fieldwork happens. Will the data help to answer the hypothesis/questions you have already set? Is the data collection manageable?</p> <p>A range of methods can be used to collect data in both the natural and human environment. For example you could measure the speed of a river at different points or count how many cars are on a road at different times during the day.</p> <p><b>Enquiry:</b> Create a questionnaire that has five questions, to investigate how safe people feel in your local area. Think about how different people will feel safer in different local places. Look out for: differences in ages (do younger or older people feel safer); particular areas where they feel safe e.g. parks or streets, and whether they feel safer closer to home. Questionnaire title: <b>Do people feel safe in my local area?</b></p> 
Week 11	Week 12
<p><b>Process and present data:</b></p> <p>Once fieldwork data has been collected, it needs to be processed and presented to make it more accessible. Calculations (such as averages or formulae) may be used to process data. The data can then be presented in graphs, on maps or by using photographs and sketches. The aim is to make the data easier to understand and draw conclusions.</p>  <p><b>Enquiry:</b> Create a chart or graph to display the data from this pedestrian count: Mon AM = 5, MON PM = 4, TUES AM = 4, TUES PM = 2, WEDS AM = 3, WEDS PM = 4, THURS AM = 4, THURS PM = 6, FRI AM = 2, FRI PM = 8.</p> <p>The numbers represent the number of people to have walked past you. AM = morning, and PM = afternoon.</p>	<p><b>Apply wider understanding</b> Once the fieldwork enquiry data has been presented, it is analysed to reveal patterns, trends and themes. Researchers describe what the data shows and suggest reasons why this is the case. This stage also involves linking patterns in the data to other areas of geography by applying wider understanding. It enables researchers to begin to draw conclusions about the hypothesis/questions.</p>  <p><b>Evaluate the enquiry</b> At the end of a fieldwork enquiry it is important to evaluate (identify advantages and disadvantages) of each part of the research. This enables researchers to improve their future fieldwork studies.</p> <p><b>Enquiry:</b> Describe the trends for the Week 11 pedestrian count (say which days show minimum/maximum values). *Challenge: Suggest reasons why there were more people on certain days, and more in the morning or afternoon.</p>

# History

Week 1	Week 2	Week 3
<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Expanding</b> – When something gets bigger</li> <li>• <b>Diverse</b> – When something has a lot of variety</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Cimarrons</b> – Africans who had escaped Spanish slavery</li> <li>• <b>Drake’s circumnavigation of the globe</b> – In 1577 Sir Francis Drake sailed around the world</li> </ul> <p><b>This week’s enquiry is...</b> <i>Why was Diego in need of rescuing?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Colony</b> – An area of a country under the control of another country</li> <li>• <b>Global</b> – Something that exists around the whole world</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>1587</b> – The Roanoke colony is founded in North Carolina by the English</li> <li>• <b>1590</b> – Mayor John White returns to find the colony abandoned</li> </ul> <p><b>This week’s enquiry is...</b> <i>What was the ‘lost colony’?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Settler</b> – A person who moves to live permanently in a country other than their own</li> <li>• <b>Indigenous</b> – Someone native to a country or place</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Pocahontas</b> – Captured by the English in 1610</li> <li>• <b>1614</b> – Married to John Rolfe while in captivity with the English.</li> </ul> <p><b>This week’s enquiry is...</b> <i>Why did Pocahontas become Rebecca Rolfe?</i></p>
Week 4	Week 5	Week 6
<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Arabic</b> – Originating in Saudi Arabia</li> <li>• <b>Currency</b> – A form of payment</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Salcombe</b> – Arabian gold ingots (currency) found off the Devonshire coast</li> <li>• <b>17<sup>th</sup> century</b> – The gold demonstrates trade with the middle east in the 1600s.</li> </ul> <p><b>This week’s enquiry is...</b> <i>Why were Arabic coins found off the coast of Devon?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Silk Road</b> – Medieval transport route between Asia and Europe</li> <li>• <b>New World</b> – A term used to describe the Americas by Early Modern explorers</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Massachusetts Bay Colony</b> – In 1628 the second colony in New England was established by John Winthrope.</li> </ul> <p><b>This week’s enquiry is...</b> <i>Who was England trading with in 1630?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Parliament</b> – Elected officials who decide on the country’s laws</li> <li>• <b>Treason</b> – To attempt to harm the ruler of a country</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Nov. 5<sup>th</sup>, 1605</b> – William Cavendish, Guy Fawkes and others attempt to blow up the houses of parliament and overthrow the protestant James I</li> </ul> <p><b>This week’s enquiry is...</b> <i>How close did the plotters come to blowing up parliament?</i></p>

# History

Week 7	Week 8	Week 9
<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Regicide</b> – To kill a monarch</li> <li>• <b>Civil War</b> – A war within one country</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>1635</b> – A Ship Tax introduced by Charles I outside of wartime</li> <li>• <b>1640</b> – New prayer book introduced in Scotland by Charles I</li> </ul> <p><b>This week's enquiry is...</b> <i>Why did Charles I lose his head?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Conflict</b> – When two sides have a disagreement or argument</li> <li>• <b>Interregnum</b> – The period when England had no monarch</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>1643</b> – Parliamentarians begin to fight Royalists in the English civil war</li> <li>• <b>30<sup>th</sup> January, 1649</b> – Charles I is executed by Cromwell and the Parliamentarians</li> </ul> <p><b>This week's enquiry is...</b> <i>Why was the civil war significant?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Supernatural</b> – Something beyond scientific understanding</li> <li>• <b>Familiar</b> – An animal that witches use to speak to the devil</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Mathew Hopkins</b> – Known as the Witchfinder General – he hunted witches in Essex during 1644-47</li> <li>• <b>Daemonology</b> – James I wrote a book on the supernatural called 'Daemonology'</li> </ul> <p><b>This week's enquiry is...</b> <i>What should we remember about the witch hunts?</i></p>
Week 10	Week 11	Week 12
<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Arson</b> – Deliberately setting fire to a building</li> <li>• <b>Huguenots</b> – French Protestant immigrants living in London during the 1600s</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Pudding Lane</b> – Great Fire begins in bakery on Pudding Lane in London</li> <li>• <b>2nd September, 1666</b> – The Great Fire lasts for four days until 4<sup>th</sup> September</li> </ul> <p><b>This week's enquiry is...</b> <i>Who caused the Great Fire in 1666?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Enlighten</b> – To shed light on something</li> <li>• <b>Progressive</b> – To develop something and move forward. To modernize it.</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>Royal Society, 1660</b> – The Royal Society is founded in 1660 so as to conduct research into scientific and philosophical endeavors. It is supported by Charles II</li> </ul> <p><b>This week's enquiry is...</b> <i>How enlightened were the people of the enlightenment?</i></p>	<p><b>Key Terms:</b></p> <ul style="list-style-type: none"> <li>• <b>Continuity</b> – To keep something the same</li> <li>• <b>Secular</b> – To not be linked to religion</li> </ul> <p><b>Key Knowledge:</b></p> <ul style="list-style-type: none"> <li>• <b>1500-1700</b> – Rough dates for the Early Modern Period</li> <li>• <b>1439</b> – Invention of the printing press by Johannes Gutenberg</li> </ul> <p><b>This week's enquiry is...</b> <i>Why was the Early Modern period significant?</i></p>

# iLife - PSHE

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



**General**

**Childline—[www.childline.org](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**

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

1x	2x	3x	4x	5x
1x1=1	2x1=2	3x1=3	4x1=4	5x1=5
1x2=2	2x2=4	3x2=6	4x2=8	5x2=10
1x3=3	2x3=6	3x3=9	4x3=12	5x3=15
1x4=4	2x4=8	3x4=12	4x4=16	5x4=20
1x5=5	2x5=10	3x5=15	4x5=20	5x5=25
1x6=6	2x6=12	3x6=18	4x6=24	5x6=30
1x7=7	2x7=14	3x7=21	4x7=28	5x7=35
1x8=8	2x8=16	3x8=24	4x8=32	5x8=40
1x9=9	2x9=18	3x9=27	4x9=36	5x9=45
1x10=10	2x10=20	3x10=30	4x10=40	5x10=50

6x	7x	8x	9x	10x
6x1=6	7x1=7	8x1=8	9x1=9	10x1=10
6x2=12	7x2=14	8x2=16	9x2=18	10x2=20
6x3=18	7x3=21	8x3=24	9x3=27	10x3=30
6x4=24	7x4=28	8x4=32	9x4=36	10x4=40
6x5=30	7x5=35	8x5=40	9x5=45	10x5=50
6x6=36	7x6=42	8x6=48	9x6=54	10x6=60
6x7=42	7x7=49	8x7=56	9x7=63	10x7=70
6x8=48	7x8=56	8x8=64	9x8=72	10x8=80
6x9=54	7x9=63	8x9=72	9x9=81	10x9=90
6x10=60	7x10=70	8x10=80	9x10=90	10x10=100

Homework Thursday 1<sup>st</sup> June 2021

Task 1

D40  $12 + 13 = \underline{25}$  ✓

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

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

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

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 Fewer ✓

K32 Unlikely ✗

L42 B, A, C ✓

C03 4 more blue balls ✓

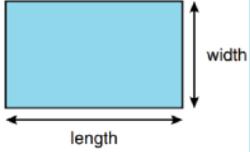
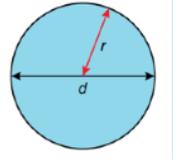
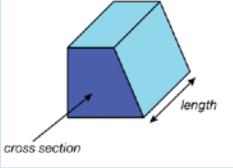
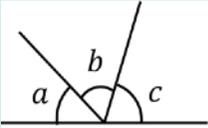
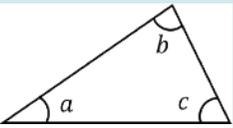
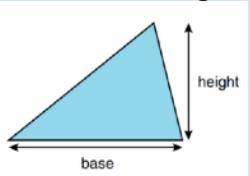
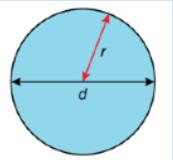
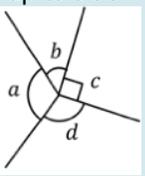
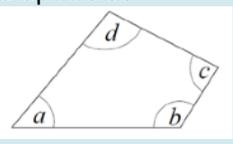
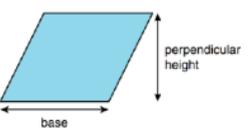
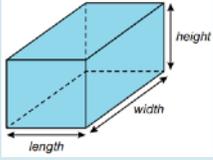
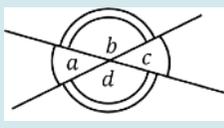
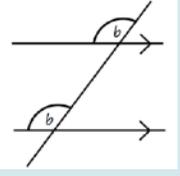
D13 4 black, 2 red, 2 blue  
 The probability of picking black is evens: Bag B ✓

E23 B ✓



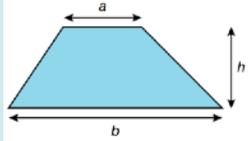
# Mathematics

Your Maths Teacher will specify which formulae you must learn.

<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="862 743 1160 1011"> <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="1160 743 1494 1011"> <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>Vertically Opposite Angles are equal</p>  <p><math>a = c, b = d</math></p>		<p>Corresponding angles are equal</p> 			

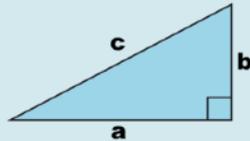
# Mathematics

## Area of Trapezium



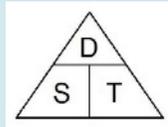
$$\frac{1}{2}(a + b)h$$

## Pythagoras Theorem



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

## Speed, Distance, Time

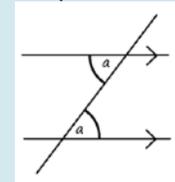


$$speed = \frac{distnace}{time}$$

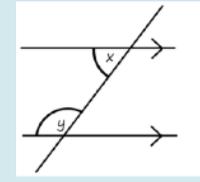
$$\% \text{ change} = \frac{\text{difference}}{\text{original}} \times 100$$

$$\text{Gradient} = \frac{\text{change in } y}{\text{change in } x}$$

## Alternate Angles are equal



## Co-interior angles add to 180



# Music

Week 1 & 2	Week 3 & 4	Week 5 & 6
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Major – the ‘happy’ sounding scale</li> <li>Minor – the ‘sad’ sounding scale</li> <li>Compose – to write music of your own.</li> <li>Atmosphere – the tone or mood of something.</li> <li>Instrumentation – the choice of instruments and sounds used by a composer.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Diegetic music – Music that exists within the film and the characters respond to.</li> <li>Non-diegetic music – music that only the audience can hear. Often known as...</li> <li>Leitmotif – a short musical idea that represents a character or a place.</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Underscoring – the music in the background of a film that creates the atmosphere.</li> <li>Mickey mousing – where the music mimics what happens on screen in a funny way</li> <li>Virtual Instruments – Computer program which make sounds like a real instrument e.g. violin.</li> </ul>
<p><u>Enquiry Task:</u> 1 orchestra, 30 film themes: <a href="https://www.youtube.com/watch?v=bUL8NQy-3gw">https://www.youtube.com/watch?v=bUL8NQy-3gw</a> Watch the first 5 soundtracks in the video and comment on the devices above in each.</p>	<p><u>Enquiry Task:</u> Watch and make notes on:  Understanding leitmotifs <a href="https://www.youtube.com/watch?v=bR2EobBG9wQ">https://www.youtube.com/watch?v=bR2EobBG9wQ</a></p>	<p><u>Enquiry Task:</u> Watch and make notes on:  How John Williams composes leitmotifs: <a href="https://www.youtube.com/watch?v=mK5zThj7uFI">https://www.youtube.com/watch?v=mK5zThj7uFI</a></p>
Week 7 & 8	Week 9 & 10	Week 11 & 12
<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>DAW – Digital Audio Workstation. Software which allows you to sample, sequence and use virtual instrument to create music.</li> <li>Sequencing – Using a DAW to arrange audio files into a piece of music.</li> <li>MIDI – A way for electronic instruments to talk to each other (including computers).</li> </ul>	<p><u>Key Words</u></p> <ul style="list-style-type: none"> <li>Consonant – chords or melody that sound nice together (in the same key or chord)</li> <li>Dissonant – music or notes that clash and sound crunchy.</li> <li>Dynamics – how loud or quiet music is.</li> <li>Texture – how many layers the music has. Whether it is thick or thin.</li> </ul>	<p><u>Key Words</u> Famous composers: John Williams, Hans Zimmer, Danny Elfman, Ennio Morricone, Howards Shore, Jerry Goldsmith, Ludwig Goransson, James Horner, Alan Silbvestri, Nainita Desai, Guy Michaelmore</p>
<p><u>Enquiry Task:</u> Pick a video from Guy Michalmore’s YouTube channel (it should be about film scoring or composing for films). Make a set of flashcards about the things he talks about.</p>	<p><u>Enquiry Task:</u> Watch a film of your choosing and write a paragraph about the underscoring using as many musical words as possible.</p>	<p><u>Enquiry Task:</u> Research the composers in the box above.</p> <ol style="list-style-type: none"> <li>1. What films did they compose for?</li> <li>2. Name their most famous leitmotif.</li> <li>3. Do they use a particular device or instrument often?</li> </ol>

# Physical Education

Reasons for Fitness Testing	Limitations to Testing	Principles of Training
<ul style="list-style-type: none"> <li>• They identify strengths and or weaknesses in a performance and the success of a training programme</li> <li>• They monitor improvement</li> <li>• They show a starting level of fitness</li> <li>• They inform training requirements</li> <li>• They compare against norms of the group and national averages</li> <li>• They motivate and sets goals for performance</li> <li>• They provide variety to a training programme</li> </ul> 	<ul style="list-style-type: none"> <li>• Tests are often not sport specific or too general</li> <li>• They do not replicate movements of an activity</li> <li>• They do not replicate competitive conditions required in sports</li> <li>• Many do not use direct measuring or are submaximal and therefore inaccurate</li> <li>• Some need motivation and therefore they can have questionable <b>reliability</b></li> <li>• Many must be carried out with the correct procedures to increase <b>validity</b> of results</li> </ul>	<p>The way in which you plan a training session/ program can be based around two principles.</p> <p><u>SPORT Principle:</u></p> <p><b>S - Specificity:</b> training should be focused <b>specifically</b> towards your chosen sport or activity.</p> <p><b>P - Progressive:</b> progressively increasing the amount of exercise you do over a period of time</p> <p><b>O - Overload:</b> working the body harder than normal</p> <p><b>R - Reversibility:</b> process of an athletes body losing fitness levels</p> <p><b>T - Tedium:</b> Making sure the training is not boring.</p>
Principles of Training	Methods of Training	
<p><u>F.I.T.T Principle:</u></p> <p><b>F – Frequency</b> (How often)  <b>I – Intensity</b> (How hard)  <b>T – Time</b> (How long)  <b>T – Type</b> (What type)</p> <p>You can use your heart rate to gauge how hard you should be working for certain types of training.</p> <ul style="list-style-type: none"> <li>• Max Heart Rate (HR) = 220 – Age</li> <li>• Aerobic Training 60 – 80% of your Max HR</li> <li>• Anaerobic Training 80-90% of your Max HR</li> </ul> <p><b>Can you work out your Maximum heart rate?</b></p>	<p><u>Methods of Training</u></p> <p><b>Continuous Training</b> - Involves exercising at a steady pace at moderate intensity for a minimum of 30 minutes with no rest.</p> <p><b>Fartlek Training</b> - Varying speed, terrain and work: recovery ratios.</p> <p><b>Interval Training (HIIT)</b> - Periods of exercising hard, interspersed with periods of rest or low intensity exercise.</p> <p><b>Static Stretching</b> - A way to stretch to increase flexibility, held (isometric) for up to 30 seconds.</p> <p><b>Chose two sports and select which training method would be most appropriate to use. Give a reason for your answers.</b></p>	<p><u>Methods of Training</u></p> <p><b>Plyometric Training</b> - use of plyometric exercises, e.g. bounding, depth jumping, to increase power</p> <p><b>Circuit Training</b> - When creating a circuit you should consider the following: Space available, Number of stations, Work: rest ratio and Content/ demand of circuit</p> <p><b>Weight Training</b> - Choice of weight/exercise depends on fitness aim.            E.g. strength/power training or muscular endurance.</p> <p><u>Muscular Endurance Weight Training</u> - Below 70% of your one rep max. Low weight x High repetitions (12-15 reps)</p> <p><u>Strength Weight Training</u> - Above 70% of your one rep-max. High weight x Low repetitions (4-6 reps)</p>

# Religious Education

Week 1- An introduction to Islam (Pre Teach)	Week 2 - Sunni vs Shia	Week 3 - Muhammad
<p><b>Imam</b> - A leader of Muslim prayer  <b>Hajj</b> - A pilgrimage, or holy journey to Makkah, performed by every Muslim at least once  <b>Mosque</b> - A Muslim temple  <b>Salah</b> - Muslim prayer performed 5 times a day (one of the 5 pillars of Islam)  <b>Shahadah</b> -The declaration of faith (saying you believe in one God, Allah)  <b>Tawhid</b> - The oneness of Allah (there are no other Gods). The cornerstone of Islam belief  <b>Muhammad</b> - The Prophet Muhammad (PBUH), chosen by Allah, who began Islam  <b>Ramadan</b> - A holy month during which Muslims fast (go without food during daylight hours)  <b>Sawm</b> - Fasting (going without food) during Ramadan.</p> <p><i>Transform these words into new sentences.</i></p>	<p><b>Sunni</b> and <b>Shi'a</b> Muslims agree on the basic principles of Islam (believing in one God, the importance of the prophets, the <b>Quran</b>).</p> <p>Split into different branches due to differences in beliefs about who was the rightful successor to the <b>Prophet</b> Muhammad.</p> <p>Sunni viewpoint - Many Muslims believed that <b>Abu-Bakr</b>, the Prophet's closest companion would be the first <b>Caliph</b>. A minority believed that Ali, the Prophet's son-in-law should lead the community (these Muslims came to be known as Shi'a).</p> <p><a href="https://www.bbc.co.uk/bitesize/guides/z78g4qt/revision/7">https://www.bbc.co.uk/bitesize/guides/z78g4qt/revision/7</a> <i>Read the information and then define the highlighted words that are in this box.</i></p>	<ul style="list-style-type: none"> <li>• Muhammad is the founder of Islam, born in Mecca.</li> <li>• Muslims believe in one God, Allah, and follow the teachings of the Prophet Muhammad, Allah's messenger (Prophet and Gods messenger).</li> <li>• Muhammad is the final prophet in Islam, known as the 'Seal of the Prophets'. Final prophet of God.</li> <li>• Muhammad recieved the word of God through Angel Gabrile, which made up the Quran.</li> <li>• Muhammad's popularity was seen as threatening by the people in power in Mecca, and Muhammad took his follower on a journey fro Mecca to Medina in 622. This journey is called the Hijrah (migration).</li> <li>• Within 10 years, Muhammad had gained so many follwer that he was able to return and conquer Mecca.</li> </ul> <p><a href="https://www.bbc.co.uk/bitesize/guides/z78g4qt/revision/5">https://www.bbc.co.uk/bitesize/guides/z78g4qt/revision/5</a> <i>Use the link and create a poster.</i></p>
Week 4 - Who is Allah?	Week 5 - The 5 Pillars	Week 6 - Salat
<ul style="list-style-type: none"> <li>• Allah is the name given to God in Islam.</li> <li>• Muslims believe in only one God (Monotheistic religion). Allah is the one true God.</li> <li>• All worship and praise is directed towards Allah; he should be treated with respect as he is the supreme being, the creator, designer and sustainer of the world. Allah created the world in a just way (Adalat).</li> <li>• Muslims have 99 names to represent His different attributes.</li> <li>• Muslims believe Allah is above and beyond anything that exists in the world.</li> <li>• Muslims believe Allah is close to every human and within all things on Earth.</li> </ul> <p><i>Explain what Muslims believe about Allah.</i></p>	<p>The Five Pillars - An important part of Muslim life.</p> <p><b>Shahadah</b> - Declaration of faith and belief in the oneness of God and acceptance of Muhammad as his messenger.</p> <p><b>Salat</b> - Prayer. Muslims must perform ritual prayers five times every day, facing the holy city of Makkah.</p> <p><b>Zakat</b> - Charity. Muslims are expected to give a portion of their income to charity.</p> <p><b>Sawm</b> - Ramadan. Muslims are expected to abstain from food and drink between dawn and nightfall.</p> <p><b>Hajj</b> - Religious pilgrimage. All Muslims who are able to travel must make this trip at least once in their lifetime.</p> <p><i>Describe each of The Five Pillars in detail.</i></p>	<ul style="list-style-type: none"> <li>• Salat is performed five times a day at set times: dawn, just after noon, in the afternoon, at sunset and in the evening.</li> <li>• Wudu- Ritual washing before prayer. This is a symbolic washing. It shows that the Muslim is ready to pray to Allah and is clean both physically and mentally.</li> <li>• Muslims pray to build a relationship with Allah. Praying five times a day is seen as an opportunity to stand before Allah, to praise and thank him for guidance.</li> </ul> <p><a href="https://www.bbc.co.uk/bitesize/clips/zsqvcdm">https://www.bbc.co.uk/bitesize/clips/zsqvcdm</a>  <i>Watch the video and create a fact file about Salat and its importance.</i></p>

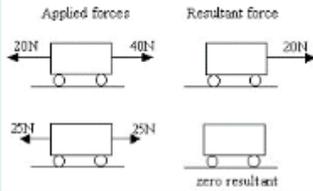
# Religious Education

Week 7 - Ramadan	Week 8 - Hajj	Week 9 - Features of a Mosque
<ul style="list-style-type: none"> <li>• During the month of Ramadan, Muslims won't eat or drink during the hours of daylight. Most Muslims fast between dawn and sunset.</li> <li>• Ramadan is the 9th month of the Islamic calendar.</li> <li>• Fasting allows Muslims to devote themselves to their faith. It is thought to teach self-discipline and reminds them of the suffering of the poor. Shows religious obligation.</li> <li>• During Ramadan, it is common to have one meal (known as suhoor), just before sunrise and another (known as the iftar), directly after sunset.</li> <li>• The end of Ramadan is marked by a big celebration called 'Eid ul-Fitr' (the festival of breaking the fast).</li> </ul> <p><b>What is the significance of fasting in Ramadan?</b></p>	<ul style="list-style-type: none"> <li>• Hajj is the Muslim pilgrimage. It is compulsory for Muslims to undertake at least once in their lifetime as long as they are healthy and can afford it. In order for it to count, a Muslim's journey must take place within the month of Dhu'l-Hijja, the 12th and final month of the Islamic calendar.</li> <li>• On the journey, Muslims change their clothes for two white cloths and enter the state of <b>Ihram</b>. This shows equality as everyone, regardless of their ethnicity, nationality or socio-economic status, is dressed in a similar way.</li> <li>• Everyone taking part is treated as an equal and there is a great sense of unity. The pilgrimage shows self-discipline and fulfils a religious duty.</li> </ul> <p><b>What is the importance of Hajj?</b></p>	<ul style="list-style-type: none"> <li>• The purpose of a mosque is to provide a place of prostration where Muslims may join together to perform Salat prayer together.</li> <li>• <b>Minaret</b> - Call to prayer (Adhan)- the tall tower in a mosque, from where muezzin performs the adhan to call the faithful to prayer.</li> <li>• <b>Prayer Hall</b> - where Muslims worship.</li> <li>• <b>Dome</b> - represents the universe and Allah's powers as creator of all. The dome is over the prayer hall, which is the main focus of a mosque.</li> <li>• <b>Mihrab</b> - Sign that they are facing Mecca and helps with the imam's voice.</li> <li>• <b>Minbar</b> - Platform that is used on a Friday to say prayers from.</li> </ul> <p><b>What are the features of a Mosque?</b></p>
Week 10 - Food laws	Week 11 - Assessment Week	Week 12 - Super Teach Week
<ul style="list-style-type: none"> <li>• Muslims follow strict food laws and only eat food which is prepared and cooked in line with Islamic law.</li> <li>• Food that Muslims are allowed to eat is called <b>halal</b> and food they should not eat is called <b>haram</b>.</li> <li>• Halal meat has been farmed, prepared and slaughtered according to <b>Sharia law</b>.</li> <li>• Haram food includes all pork products, animals that eat meat and animals that have not been slaughtered according to Islamic law.</li> <li>• Some Muslims choose to be vegetarian as they believe it is healthy, safe, helps protect animals from factory farming and it promotes the Muslim belief that God is compassionate and merciful.</li> </ul> <p><b>What are the food laws within Islam?</b></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, remember <b>not</b> to draw Allah or Muhammad..</li> <li>• Summarise each week into 20 words, using images to also help you, remember <b>not</b> to draw Allah or Muhammad.</li> <li>• Create a 'quizziz' or kahoot on the information that you have learnt.</li> </ul>	<ol style="list-style-type: none"> <li>1. Which one of the following means oneness of God? [1] Allah / Tawhid / Hajj / Salat</li> <li>2. Give two Islamic teachings about pilgrimage [2].</li> <li>3. Explain two Islamic beliefs about food laws [4].</li> <li>4. Explain two Islamic beliefs about Ramadan [5].</li> <li>5. 'Shahadah is the most important of the 5 pillars' Discuss [12].</li> </ol>

# Science

Key words	Week 1
<p><b>Key words</b></p> <p><b>Energy Transfer:</b> movement of energy from one system (or store) to another.</p> <p><b>Dissipate:</b> to spread out to the surroundings</p> <p><b>Density:</b> mass per unit volume of a substance. i.e. mass compared to the size.</p> <p><b>Energy Efficiency:</b> how much of the energy is being used in useful ways compared to how much is being wasted.</p> <p><b>Conservation of energy:</b> energy cannot be created or destroyed, only transferred i.e. the total amount of energy does not change.</p> <p><b>Renewable:</b> an energy source that is naturally replaced and not used up.</p> <p><b>Non-renewable:</b> a finite energy source as it is used quicker than it is made.</p> <p><b>Climate Change:</b> long-term change in the average weather patterns</p> <p><b>Force:</b> An interaction that can change the motion of an object. It can be a push, pull or twist.</p> <p><b>Elastic:</b> an object that when stretched will return to its original shape.</p> <p><b>Inelastic:</b> an object that when stretched will keep its new shape.</p> <p><b>Resultant:</b> the net force acting on an object because of several forces.</p>	<p><b>Open system:</b> where energy <u>can</u> be exchanged with the outside world.</p> <p><b>Closed system:</b> where energy <u>cannot</u> be transferred in or out.</p> <p><b>Energy transfers:</b> how energy is passed from one store to another.</p> <p><b>Dissipate:</b> when energy spreads out to the surroundings.</p> <ol style="list-style-type: none"> <li>1. <b>Energy</b> is the ability of a system to do <b>work</b>.</li> <li>2. Energy can be <b>stored</b> in different forms (gravitational potential energy, kinetic energy, elastic potential energy, chemical energy, nuclear energy and thermal energy).</li> <li>3. Energy can be <b>transferred</b> between these stores by heating (thermal), radiation (light and sound), electricity and mechanically (by a force).</li> <li>4. <b>Conservation</b> of energy states that energy <b>cannot be created or destroyed</b>.</li> <li>5. Useful energy is the energy needed in the correct form and in the correct place.</li> <li>6. Wasted energy is energy in an unwanted form or in an unwanted place.</li> </ol> <p><b>Enquiry task:</b> Identify energy stores and transfers for the room you are in.</p>
Week 2	Week 3
<p><b>Efficiency:</b> how much of the energy is being used in useful ways compared to how much is being wasted. Greater the useful energy, greater the efficiency.</p> <p><b>Thermal conductivity:</b> how well a material is able to let heat pass through it.</p> <p><b>Thermal insulators:</b> a material that will limit/prevent heat passing through it.</p> <ol style="list-style-type: none"> <li>1. Energy efficiency = useful energy transferred / total energy transferred</li> <li>2. A <b>Sankey diagram</b> uses arrows drawn to scale to represent useful and wasted energy transfers.</li> <li>3. Mechanical processes become <b>wasteful</b> when they cause a rise in temperature, so energy is <b>dissipating in heating the surroundings</b>.</li> <li>4. Thermal energy is transferred through solids by <b>conduction</b>.</li> <li>5. Conduction is when <b>vibrating</b> particles touch and transfer energy. The closer the particles, the higher the rate of conduction.</li> <li>6. <b>Lubrication</b> and thermal insulators can be used to reduce transfer of thermal energy in solids.</li> <li>7. Increasing thickness of materials reduces thermal conductivity.</li> </ol> <p><b>Enquiry task:</b> Research what cavity walls are and describe how they reduce heat energy transfer by conduction.</p>	<p><b>Fluids:</b> the term used for gases and liquids.</p> <p><b>Convection current:</b> the rise and fall of particles carrying energy in a fluid.</p> <p><b>Emit:</b> to give off.</p> <ol style="list-style-type: none"> <li>1. Thermal energy is transferred through fluids by <b>convection</b>.</li> <li>2. Convection is where <b>hotter, less dense</b> regions of fluid rise and carry the energy, they then release energy and fall. This creates a <b>convection current</b>.</li> <li>3. Thermal energy is transferred by <b>radiation</b> where there are <b>no particles</b> (i.e. energy from the sun is transferred by infrared radiation to the Earth).</li> <li>4. Thick walls (materials) will reduce the rate of energy transfer.</li> <li>5. Materials that have a low thermal conductivity (air, wool, paper) will reduce the rate of energy transfer.</li> <li>6. Shiny/light coloured materials can reflect energy transferred by radiation (i.e. foil, white)</li> </ol> <p><b>Enquiry task:</b> Design a house with at least 5 different methods of reducing the rate of energy transfer from inside the house to the outside world.</p>

# Science

Week 4	Week 5												
<p><b>Non-renewable:</b> a finite energy resource that's used up quicker than it's made.  <b>Renewable energy:</b> a resource that is made quicker than it is used.  <b>Gravitational potential energy:</b> The energy stored in a raised object.</p> <ol style="list-style-type: none"> <li>1. Non-renewable energy resources include <b>fossil fuels</b> (oil, natural gas, coal) and <b>nuclear energy</b>.</li> <li>2. Renewable energy resources include biofuel, wind, solar, hydroelectricity, tidal, wave and geothermal.</li> <li>3. Burning fossil fuels release <b>greenhouse gases</b> including carbon dioxide that contributes to <b>climate change</b>.</li> <li>4. Nuclear power stations do not produce greenhouse gases but do produce dangerous <b>radioactive waste</b>.</li> <li>5. Most renewable resources emit very little or no carbon dioxide.</li> <li>6. Renewable resources are <b>unreliable</b> and have <b>low power output</b>.</li> <li>7. <b>Gravitational potential energy (J) = mass (Kg) x gravitational field strength (N/kg) x change in height (m)</b></li> </ol> <p><b>Enquiry task:</b> Create a poster detailing different energy sources, this should include pros and cons of each.</p>	<p><b>Kinetic energy:</b> the energy stored in moving objects.  <b>Vector:</b> quantity that has magnitude (size) <i>and</i> direction.  <b>Scalar:</b> quantity that has magnitude (size) only.  <b>Velocity:</b> Speed in a given direction.  <b>Gradient:</b> how steep a line is</p> <ol style="list-style-type: none"> <li>1. <b>Kinetic energy (J) = 0.5 x mass (Kg) x velocity<sup>2</sup> (m/s)</b></li> <li>2. Energy is measured in <b>joules (J)</b>.</li> <li>3. Motion of objects can be plotted on a <b>distance-time graph</b>.</li> <li>4. The <b>gradient</b> of the line shows the <b>speed</b> of the object.</li> <li>5. The <b>steeper</b> the line, the <b>faster</b> the object is travelling. Horizontal lines mean the object is <b>stationary</b>.</li> <li>6. Speed (m/s) = distance (m) / time (s) Average walking speed is 1.5 m/s</li> </ol> <p><b>Enquiry task:</b> Sketch the graph. You walk to the shops and it takes you 5 minutes to cover 450 meters. You stop to chat for 10 minutes before walking quickly home, which only takes you half the time.</p> <table border="1" data-bbox="1722 432 2063 724"> <thead> <tr> <th>Scalars</th> <th>Vectors</th> </tr> </thead> <tbody> <tr> <td>Distance</td> <td>Displacement</td> </tr> <tr> <td>Speed</td> <td>Velocity</td> </tr> <tr> <td>Temp.</td> <td>Momentum</td> </tr> <tr> <td>Mass</td> <td>Weight</td> </tr> <tr> <td>Energy</td> <td>Acceleration</td> </tr> </tbody> </table>	Scalars	Vectors	Distance	Displacement	Speed	Velocity	Temp.	Momentum	Mass	Weight	Energy	Acceleration
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Week 6	Week 7												
<p><b>Acceleration:</b> how fast velocity is changing. The units are m/s<sup>2</sup>.  <b>Force:</b> interactions between two objects.  <b>Contact force:</b> forces that require objects to touch (friction, thrust)  <b>Non-contact forces:</b> forces that do not require objects to touch (magnetism)</p> <ol style="list-style-type: none"> <li>1. Acceleration can be plotted on a <b>velocity/time graph</b>.</li> <li>2. The <b>area</b> under the graph is the <b>distance</b> travelled.</li> <li>3. The steeper the gradient the greater the acceleration or deceleration.</li> <li>4. Change in speed = final speed (m/s) – initial speed (m/s)</li> <li>5. Acceleration (m/s<sup>2</sup>) = change in speed (m/s) / time (s)</li> <li>6. Forces include weight, lift, drag, thrust, friction, air resistance, upthrust, reaction, magnetic force and elastic force.</li> <li>7. Forces occur in action-reaction pairs.</li> <li>8. <b>Arrows</b> represent forces on a force diagram. This can tell us the direction and size of the force. A larger arrow means a greater force.</li> </ol> <p><b>Enquiry task:</b> Draw a velocity/time graph that shows acceleration, constant velocity and deceleration and add labels.</p>	<p><b>Deformation:</b> when an object is compressed or squashed and changes shape.  <b>Elastic deformation:</b> distortion that is reversed when the force is removed.  <b>Inelastic deformation:</b> distortion that is not reversed when the force is removed.  <b>Newton:</b> the unit of measurement for force (N).  <b>Resultant forces:</b> the overall forces acting on an object in a system.</p>  <ol style="list-style-type: none"> <li>1. <b>Hooke's Law</b> says that force is proportional to extension (i.e. if you double force, you double extension).</li> <li>2. Force exerted on a spring (N) = spring constant (N/m) x extension (m)</li> <li>3. Where forces are <b>balanced</b> the object is stationary or moving at a constant speed.</li> <li>4. Where forces are <b>unbalanced</b>, the speed or direction of the object is changing.</li> </ol> <p><b>Enquiry task:</b> Sketch a diagram to show the forces acting on a skydiver at different stages of the jump</p>												

# Science

## Week 8

**Mass:** the amount of matter in an object (measured in kg).

**Weight:** the force of gravity on an object (measured in N).

**Terminal velocity:** when speed becomes constant.

1. Weight (N) = mass (kg) x gravitational field strength (N/kg)
2. The **weight** of an object will depend on the **gravitational field strength** of the planet that you are on.
3. Gravitational field strength on Earth = **10 N/kg**
4. **Newton's first law states** that an object will remain at rest or constant velocity unless a force acts on it.
5. **Newton's second law:** Force (N) = mass (kg) x acceleration (m/s<sup>2</sup>)
6. To measure weight you use a **force meter**.
7. Worked example: Find the weight of a person on Earth if they have a mass of 65 kg ( $g = 10 \text{ N/kg}$ ).  $W = m \times g = 65 \times 10 = \mathbf{650 \text{ N}}$
8. Planets are different sizes and therefore have different gravitational field strengths. Therefore an astronaut's mass will remain constant but their weight will change depending on what planet they are on.

**Enquiry task:** Research the gravitational field strength on different planets and calculate what your weight would be on these planets

## Week 9

**Thinking distance:** how far you travel during the driver's reaction time.

**Braking distance:** how far you travel whilst braking until you stop.

Factors affecting thinking distance	Factors affecting braking distance
Distractions Drugs Alcohol Tiredness Speed	Mass of vehicle Tyre friction Road friction (e.g. wet roads) Brake friction Speed

**Stopping distance:** thinking distance plus braking distance.

1. **Light gates** are equipment used to measure speed.
2. Increasing the **force** acting on a trolley will increase its **acceleration**.
3. Increasing the **mass** of the trolley will decrease the **acceleration** of the trolley.
4. Experiments are **repeated** to check reliability of results.
5. **Reaction time** is how long it takes you to react. This will affect your thinking distance.

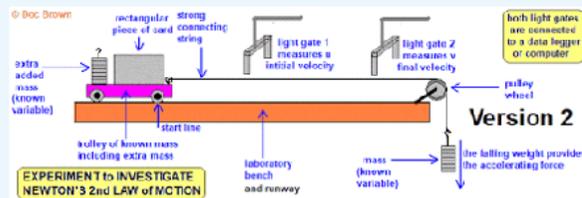
**Enquiry task:** Create an informative poster for drivers explaining stopping distance and factors that affect it.

## Required practical

### Acceleration core practical

1. Place a **trolley** of known mass on a friction compensated ramp.
2. Set up a **light gate** at either end of the ramp.
3. Accelerate the trolley along the ramp using a **pulley and falling weight** (this provides the force).
4. Use the light gates to measure the trolley's **initial velocity, final velocity, and time taken** between the gates as it moves down the ramp.
5. **Calculate** the **acceleration** of the trolley
6. **Repeat** steps a-e, adding a known mass to the trolley each time.

**Conclusion:** acceleration is directly proportional to the size of the force exerted on the object.



## Assessment week

### Enquiry Tasks

1. **Describe** how you would measure the extension and work done in stretching a spring. Include what measurements you would take, how you would take them, and what calculations you would do.
2. **Draw** a force diagram showing a plane accelerating down a runway, and another where the plane is flying at a constant velocity
3. **Write** a method to find the relationship between *force* and acceleration. Identify the variables clearly.
4. **Describe** the effect of increasing speed on thinking distance and braking distance
5. **Explain** the features we have in our homes to make them more energy efficient by minimizing unwanted heat loss
6. **Evaluate** the use of renewable and non-renewable energy sources. As a country, which energy sources should we be focusing on, why, and why not the others?









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