Year 7 Knowledge Organiser Term 3

This booklet contains some of the key content we want the students to learn this term. Knowledge Organisers are placed in the relevant Google Classroom.

How students and parents can use a Knowledge Organiser to maximise learning:

Pick a subject to recall and memorise
Look at the pages for that subject
Read the page information for that subject
Cover the page of information
Write the information for that subject from memory
Check what you have written. Correct mistakes and add anything you have missed
Your teacher will quiz you in class to see what you can recall

• Repeat the process over time and focus on the information you keep missing or make mistakes on





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A Monster Calls- Monoprinting Project

Assessment Objectives:

- A01 Developing ideas through research
- A02 Using resources, experimenting with different media and ideas
- AO3 Recording ideas (photos & drawings)
- AO4 Personal response

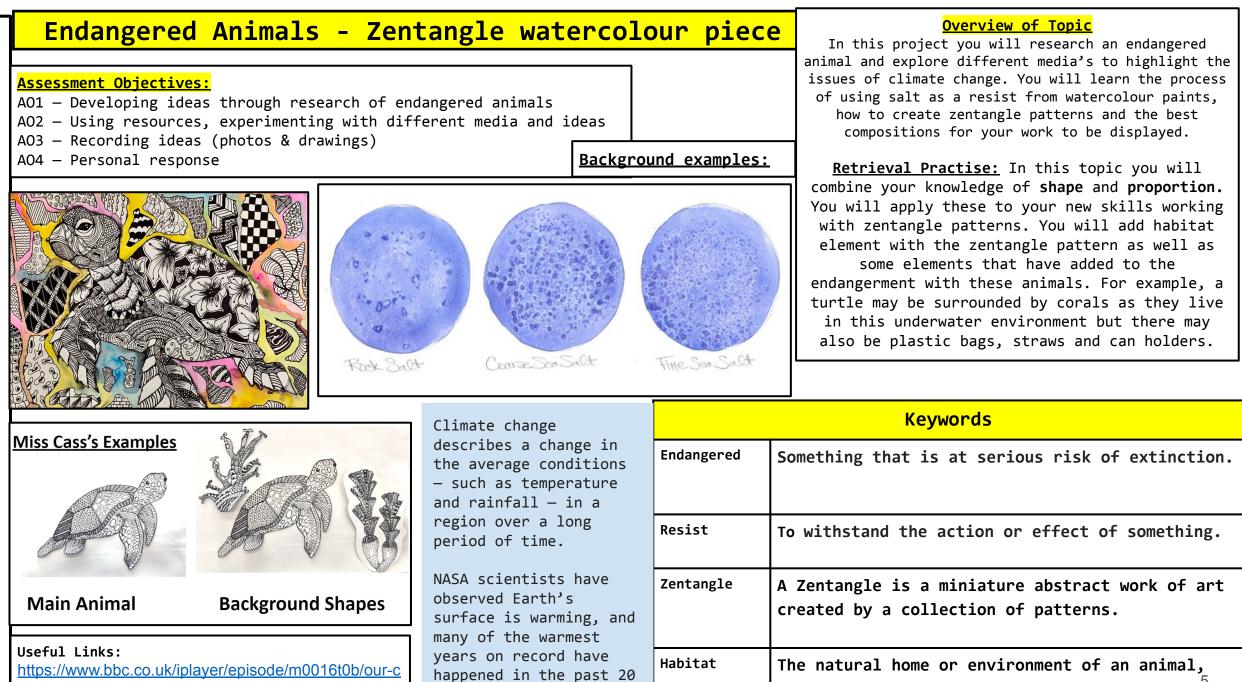
Overview of Topic

In this project you will explore the work of Jim Kay an illustrator famous for his work in the book 'A Monster Calls' and Harry Potter. You will learn the process of creating a Monoprint.

Retrieval Practise: In this topic you will combine your knowledge of how to create an Artist Research page (a key GCSE skill) and how to use key artistic elements of shape, tone, line and texture. You will apply these to your new printing making technique to create your own monoprint based on key scenes from 'A Monster Calls'.

Examples of Monoprinting:			Keywords
	MANUNA DE	Monoprinting	The monoprint is a form of printmaking where the image can only be made once, unlike most printmaking which allows for multiple originals.
R		Blotting	To dry an area of ink/ wet substance using absorbent materials e.g newspaper.
		Mark Making	Mark making describes the different lines, dots, marks, patterns, and textures we create in an artwork. It can be loose and gestural or controlled and neat.
	A set of the set of th	Texture	The feel, or appearance, or consistency of a surface or substance. Such as rough, smooth, bumpy.
		Tone	In Art, tone refers to the lightness or darkness of a colour. The shadows and highlights.
Useful Links: https://www.youtube.com/watch?v=ql2 https://www.tate.org.uk/art/art-term	-	Illustration	An illustration is a decoration, interpretation, or visual explanation of a text, concept, or process, designed for integration in print and digitally published media, such as posters, flyers, magazines, books, teaching materials, animations, video games and films.

	How to	<mark>o create a Mo</mark>	noprint:			Keywords
	Make sure you have a	all your equipment and	station ready fo	or printing:	Monoprinting	The monoprint is a form of printmaking where the image can only be made once, unlike most printmaking which allows for multiple originals.
			× 51% Entering and the second		Blotting	To dry an area of ink/ wet substance using absorbent materials e.g newspaper.
	then lay your plate ink, roll	I the ink out over the plate. magazine page the ink as evenly as you allow you to acl	a	arefully remove the scrap sheet nd bin it. Your plate is now ready o be used for printing.	Mark Making	Mark making describes the different lines, dots, marks, patterns, and textures we create in an artwork. It can be loose and gestural or controlled and neat.
Art					Texture	The feel, or appearance, or consistency of a surface or substance. Such as rough, smooth, bumpy.
					Tone	In Art, tone refers to the lightness or darkness of a colour. The shadows and highlights.
	Lay a clean A4 sheet down on top of your inked plate. Lay it down without pressing the paper to the plate. Use a piece of tape to secure it.	Lay your design/drawing on top of the blank paper, as centrally as possible, and also secure it with a piece of tape.	Use a normal biro or pen and trace over your drawing with it. Lean heavily on it this will help to transfer the ink. Avoid leaning fingers or hands on the page!		Illustration	An illustration is a decoration, interpretation, or visual explanation of
		Use a piece of scrap paper, a news paper page magazine page to remove excess ink. This will allow you to achieve a cleaner print. Use the palms of your hands to rub the back of the sh	I			a text, concept, or process, designed for integration in print and digitally published media, such as posters, flyers, magazines, books, teaching materials, animations, video games and films. 4



vears.

plant, or other organism.

hanging-planet-series-1-episode-1

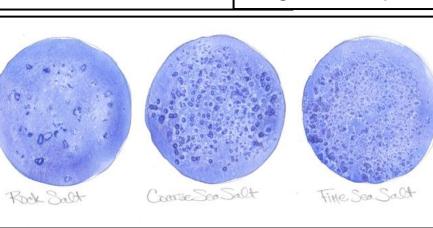
Endangered Animals - Zentangle watercolour piece

<u>Assessment Objectives:</u>

- A01 Developing ideas through research of endangered animals
- AO2 Using resources, experimenting with different media and ideas
- AO3 Recording ideas (photos & drawings)
- AO4 Personal response

Background examples:



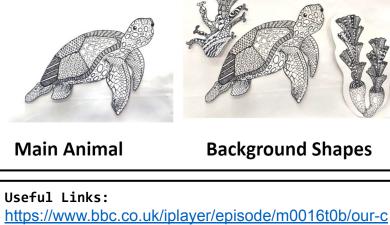


<u>Overview of Topic</u>

In this project you will research an endangered animal and explore different media's to highlight the issues of climate change. You will learn the process of using salt as a resist from watercolour paints, how to create zentangle patterns and the best compositions for your work to be displayed.

Retrieval Practise: In this topic you will combine your knowledge of shape and proportion. You will apply these to your new skills working with zentangle patterns. You will add habitat element with the zentangle pattern as well as some elements that have added to the endangerment with these animals. For example, a turtle may be surrounded by corals as they live in this underwater environment but there may also be plastic bags, straws and can holders.

Miss Cass's Examples

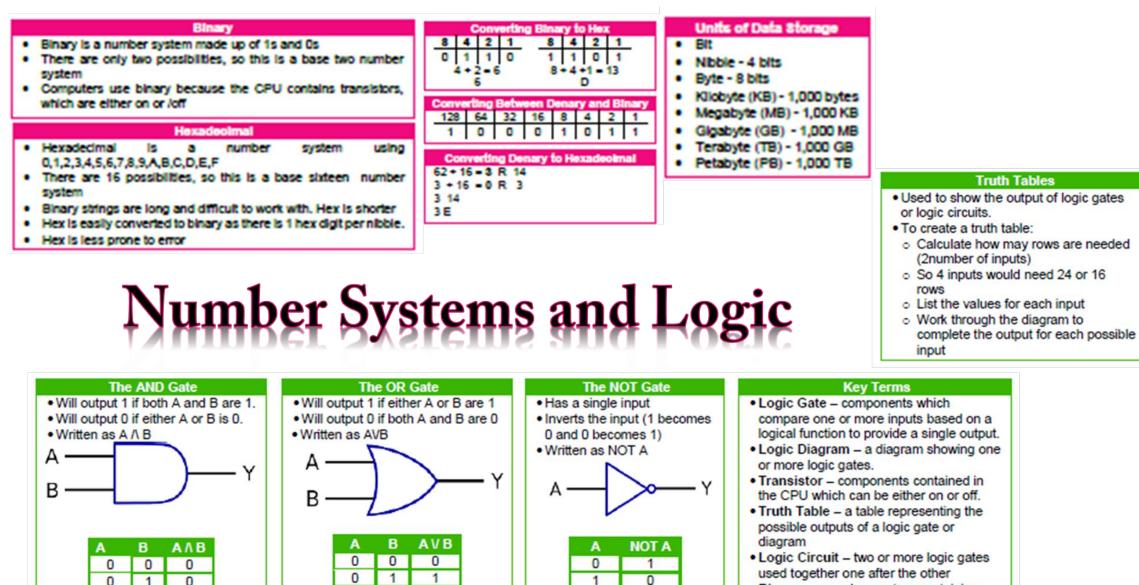


https://www.bbc.co.uk/iplayer/episode/m0016t0b/o hanging-planet-series-1-episode-1 Climate change describes a change in the average conditions — such as temperature and rainfall — in a region over a long period of time.

NASA scientists have observed Earth's surface is warming, and many of the warmest years on record have happened in the past 20 years.

Keywords

Endangered	Something that is at serious risk of extinction.
Resist	To withstand the action or effect of something.
Zentangle	A Zentangle is a miniature abstract work of art created by a collection of patterns.
Habitat	The natural home or environment of an animal, ₆ plant, or other organism.



Computing

 Binary – a number system containing two symbols, 0 and 1. Also known as Base 2 hod that can be used to create a



Dance by chance is a method that can be used to create a **motif**. It is a method that was founded by Merce Cunningham and John Cage in the 1950's.

Here are some examples of how the chance operations can be used; dice, playing cards, numbers etc..

The different elements of the choreography (e.g. movements, choreographic devices etc) are all chosen completely at random before being put together to create a motif.

Endpoint

Over the next term you will understand and apply a range of choreographic skills to taught and created motifs. This will be completed through learning and developing set motifs, as well as creating your own movement using the Chance Method of Merce Cunningham. You will be expected to understand and apply the choreographic skills, as well as evaluate your progress.

Keep your head up

and know what is

around you.

Warm up properly

your muscle.

including stretching

Reminder

Exercise in safe

of others.

spaces. Be mindful

Dance club for will take place on Monday's 3-4pm in the Dance Studio.

Motif	A set	phrase of movement that can be repeated and developed							
Choreography	A me	A method of creating your own movement							
Choreographic Intention		The aim of the dance, what the choreographer aims to communicate							
Motif developments	Meth	Methods used to vary/develop a movement phrase							
Retrograde	То ре	erform a motif i	n a reverse order	order					
Fragmentation	To re	-order the moti	f						
Home Learning Task	<u>S</u>								
Rehearse the taught r	notifs	Create an 8/16 count motif Revise the keywords							
Health & Safety in c	ance								
Bend your knees when you land from jumps.	liquids a away fr	ure that are kept well om the surface.	Remove jewelle and wear suitab clothing.		Be respectful and compassionate to others.				

Struct The ways in which	a dance is made,		Motif se encapsulating an idea that is repeated reloped throughout the dance	Motif Development Change the: • Level • Direction					
built, ordered o	or organised.		Size	Dynamic					
Binary	AB	Aural	ettings niment to the dance						
Ternary	ABA	 Mood(s) 	 Meaning(s) 	 Song 	Silence				
Narrative	ABC	 Idea(s) Style/Style F 	 Theme(s) usion 	InstrumentalOrchestralFound sound	Spoken wordNatural soundBody percussion				
Episodic Arch	A B C D ABCBA	C	HOREOGRAPHY Year 7	Aural Setting – Effects on choreographic outcomes Mood • Variety					
Rondo	ABACADA			Atmosphere	Structure				
Ch	oreographic De sed to develop and		Choreographic Processes Activities involved in creating dance	Contrast Relationship to theme/idea					
 Climax Highlights Manipulati Number 	• • ion of	Unison Canon Motif and lopment	 Researching Improvising Selecting Developing Structuring Refining Generating 	Dynamics How? • Fast/Slow • Sudden/Sustained	Relationships With? • Lead & Follow • Mirroring				
 Travel Turn Elevation Gesture 	parts	of different body	Space Where?• Pathways• Patterns• Levels• Spatial design• Directions• Size of movement	 Strong/Light Direct/Indirect Flowing/Abrupt Acceleration/ Deceleration 	 Action/Reaction Accumulation Counterpoint Complement & Contrast Contact Formations 9 				

Technology and Design

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Source/Origin	Polymers come from crude al. They can also come from gas and coal. This can be found beneath the Earth's surface. Below is how we get it and change if thing polymers:	.pe	survice and stored. This can be darie an international provides and stored and store a	-	2. This oil is then transported via a crude Inter to somewhere called an all refinery. 3. When at the refinery, the ail is heated and al different	temperature file collect the different products.	expertence of the second	hurrenting of here the		E 0	in technology there are some biodegradable ones, here are some of the impacts:	7 3	vater	 Iakes a kin of energy to produce. 	KNITTED FABRICS This is when your is interforced (connect) with each other.	Weft - hand or machine and loops across the width. Weft - hand or machine and less prone to unravelling and loadening.		Nome Characteristics ues Knitted fabric Warm to wear, Jumpes, cardigans, Afferent shints hove portwear and tights, afferent shapes, sportwear and tights, afferent shapes, retent shape	Source/Origin Fabric can be sourced from many places as you can see from the table. However they are mainly animal sources, chemical sources	and vegatable sources. Then when you've got the source this is what happens: 1. This is what some of the raw fibres look like,	this is once they have all been collected. E.g. you could have a pile of wool or cotton.	 Then to turn this into years, the raw material is spun or wristed by hand or machine. It is spun and twisted until it becomes useable.
(mers (Plastics)	This group of polymers, once set in shape CANNOT be reformed	known as mermozens. These are generally mare rigid before and after they've been heat	These ore harder to recycle. Make excellent electrical insulators.		Name Characteristics Uses Epoxy resin Stronger than other Bonding different resin. resin. expansive and materials together.	Melamine Food sofe, hygienic Kitcherware - but it foomoldehyde and lightweight. con't be put in the microwave	Urea formoldehyde Heat resistant and Blachical filtings. very good electrical casings, buttors and insulator hondles.	Polyester resin Reasonably strong, Waterpoof coatings heat resistant and a good electrical good electrical resultador.	Phenol formuldehyde Very hard and brittle. Electrical An excellent components.		BIOPOLYMERS	Newer plastics are made from vegetable starches and can be composted - these are great for the environment. Here are some: PLA - PeMactic Actid	Non toxic, easily shaped and typically used for 3D printers.	when hearled. Used for pens, phone cases, disposable food and rips.	tiles Blended & Mixed Fibres	blended and mixed together - so n	Name Characteristics Uses	Poly-cotion More durable than Ceneral clothing. pure cotion bur not Sheets and beadding. as breathable.Can Used as alternative to be pouceed more pure cotion.	WOVEN FABRICS There are fabrics where they follow a pattern - one piece goes up and over whilt the over does the	opposite. Weaving. TYPES:	Name Characteristics Uses Plain weave e.g. Simple and cheaper Ceneral clothing.	than other weaves.
Materials and their Properties: Polymers (Plastics)	THERMOTORMING This group of polymers are able to be formed into a different shape	over and over again, known as mermoprasics. These are generally more flexible, especially when heated.	These are easier to recycle. Can be formed into complex shapes.		Name Characteristics Uses Palyethylene Easty blow moulded Bottles, food terephthodde	High dentity Lightweight, inp and Milk bofflex, piper, Polyethylene chemical proof. hard hot and wheelie birs.	Flexible, high plasticity, tough and easily extruded.	Polyerby/ene Polyerby/ene Polyerby/ene Polyeropy/ene Polyeropy/ene Polyeropy/ene Polyeropy/ene Polyeropy/ene	2.0	High Impact Reaible, impact Vocum formed Polystyrene Resident, lightweight products such stood (HIPS). 265 and content of containers or yoghurt order Timic when order and some such some order timic when order and some some some order and some some order and some some order and some some some order and some some some some some some some some	PS burned.	Active Count of the many sector and the many	Folymorph	Non toxic, easily mouldable and re-mouldable when heated. Used for modelling or personalisation of hand grips.	Materials and their Properties: Textil NATUR AL FIRRES	from 2 sou	Fabrics from plant based are renewable but take a long time	Characteristics Uses Nome Characteristics Uses Cotton (plant) Soft, strong and Most clothing and absorbent, cool to can be used for wear and easily workhole. Good	Wool (animal - Can be fine and Jumpers, coarts, suits sheep) in thick, naturally worm and carpets, coarts, suits the and and carpets and c	mal - silk	finish, gentle, warm in winter and cool in summer. Absorbent and strong.	SYNTHETIC FIBRES Synthetic fibres are ones that are mon-made.

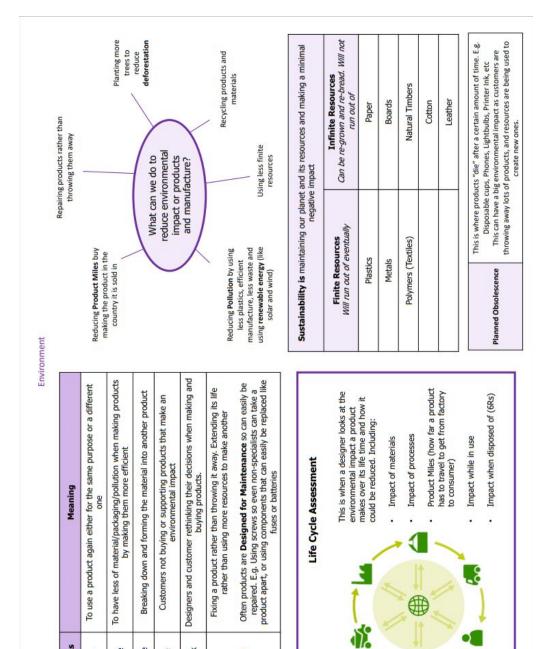
Environment: Preventioned the impacts that manufacturing textiles has on the environment: They use a lot of votare in the lot of votare s been further processed so So it will look something similar to this once it has processed, such as being dyed. Some are further p they become thinner and smoother. and twisted until it due to fast machine. It is spun o becomes useable. FABRICS Uses Disposable products such as protective clothing they have bee aven't been spun into yarn -ugh heat or adhesive (glue). Characteristics Lack strength, no grain so can be cut in any direction and not NON-WOVEN or of e are fibres tha TYPES: Sportswear, exerci clothing, swimsui and general clothi Clothing, ropes webbings, parachutes a sports mate ants, Added to fabric to enhance working properties, to add stretch. Freedom of id strength, ha vearing, non orbent, machir wearing, very atile, holds col well and non absorbent. SYNTHETIC FIDES are ones that are man se TYPES:

a wat

Technology and Design

Production Processes

Name of Process	Diagram	Material	Products Made	Key info
Screen- printing	Another Andrease	Papers and Textiles	Posters, signs and t-shirts	Screen printing places paint on top of a screen. The screen has a stendl embedded in it, so when the paint is passed across it the desired shape is printed underneath. Good process in one-off and batch production as often done by hand
Offset Lithograp hy	Lago M	Papers and card (thin, flexible plastics)	Posters, newspapers, plastics bags	Rollers containing the colours and water go onto the plate cylinder. The water stops the colours sticking to certain places, meating the shape. The shape is transferred between rollers and onto the material. Can be used at batch and mass production
Lathe Turning	BICE VEW PART AGIN BICE VEW MARCEONNE MA	Wood and metal	Chair legs, baseball bats)(cylindrical items)	Material is placed between the tail stock and the headstock and spun at high speed. The material is then cut using specialist tools (either by hand or my automated machinery) to the desired shape. Can be used in one-off and batch production
Die Casting	the state of the s	Metal	Car parts, engine components, etc	Molten metal is poured into a chamber and a plunger forces the metal through the nozzle into the mould. Unlike sand casting, the mould is reusable. Good process for both one-of and batch production
Injection Moulding	Angre states of the states of	Plastics	Chairs, toys, etc	Plastic granules are poured into the hopper and onto the screw. The screw moves the material towards the heater where it turns into a liquid. The liquid is then forced into the mould, cooled and released. Great process for mass production as it makes 100s+ of products at once, to a identical standard.
Blow Moulding	transm the holding (status) vice	Plastics	Plastic bottles	A Plastic parison is heated and put into the mould. The parison is then filled with air (like blowing up a balloon) and is forced of fit the mould shape. It is then cooled and then released. This is a great process for mass producing bottles.



The 6Rs

Reuse

Reduce

Recycle Refuse Rethink

Repair

•

Ernie's Incredible Illucinations

Key Vocab							
Audience Awareness	Being aware of where your audience is, what they can see and what they can hear.						
Costume	What the performer wears on stage to show a particular character.						
Creativity	Using your imagination to create new ideas.						
Lights	Lighting that is used to draw focus to a character, an element or an emotion.						
Physical Theatre	A style of theatre where the actor uses their body as the primary tool for performance.						
Props	Any object used in a performance that is not a part of the set or worn by an actor.						
Sound	Sound can be used to create a setting and portray the emotions of a character.						

Summary

Like all schoolboys Ernie has a vivid imagination, but Ernie's thoughts have a disturbing habit of turning into reality.

After a number of embarrassing episodes, Ernie's parents decide to consult a doctor, who is sceptical. Several of Ernie's adventures arc acted out for us in flashback, but when Ernie fails to produce a Brass Band on demand, the doctor diagnoses group hallucination and recommends a visit to a specialist.





Characters							
Ernie Main character, suffers from 'Illucinations' and can't seem to keep a hold of reality							
Mum Ernie's mum, middle aged							
Dad Ernie's dad, middle aged							
Receptionist Receptionist at the doctors office							
Doctor The sceptical doctor who doesn't believe in 'Illucinations'							
Officer							
Auntie May Ernie's aunt that comes to visit him.							
First, Second, Third and Fourth Barker							
Referee							
Timekeeper							
Man/Woman							
Kid Saracen Wrestler that has a fight with Ernie.							
	Library Attendant						
	Librarian						
Homeless Person							
Pati	ents, Soldiers, Crowds, Boxers and Others						
Key Knowledge							

Written in 1969 by Alan Ayckbourn.

Popular in schools due to it's interesting and imaginative plot.

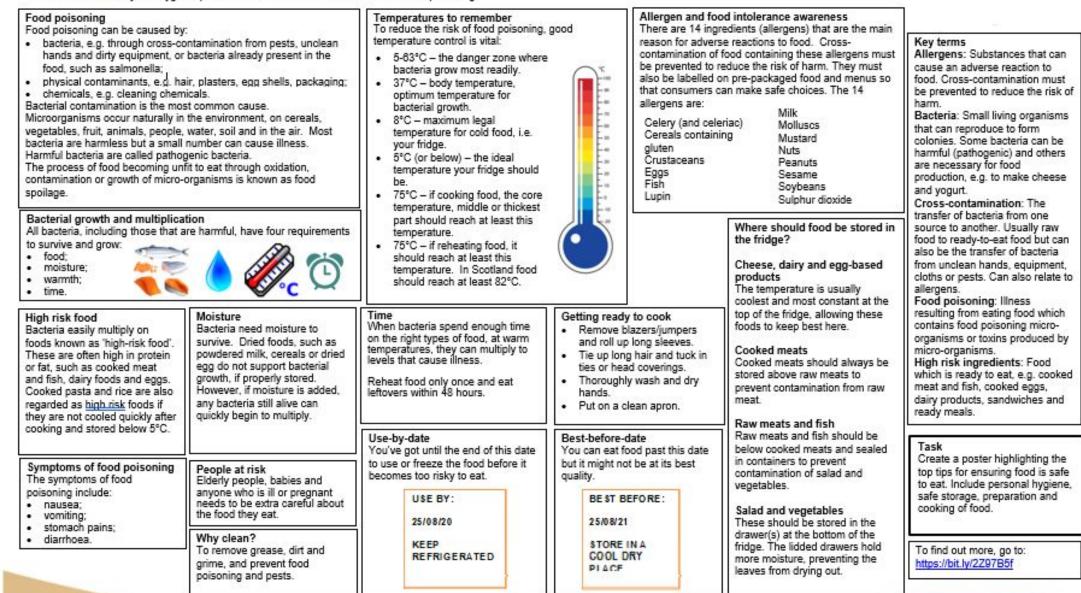
It was adapted to a TV movie in 1987, with Tim Barker staring as Ernie's Dad.

Totest	Literature - Knowledge O						
<u>Exam Question</u> Write a story about a character that rebels or protests against a strict society.	Success Criteria • Structure • Content • Vocabulary	Sentence Starters Verb - Running quickly, she / Glittering in the inky night, the stars were captivating. Adverb - Darkly, she smiled / Fervently, he grabbed all the supplies he could. Adjective - Red light filled the room / Vulnerable, the young deer remained unaware of the danger. Preposition - Down there, in the darkness / At the door he heard a sound. Connective - However, his life					
Structure of Creative Writing	Planning	Keywords					
Drop		Repetition	Cyclical Structure				
 The 'drop' is the beginning of your story. In this section, you must create a scene which is dramatic, shocking and original. 		Metaphor	Sensory Language				
Zoom		Personification	Zoom In / Zoom out				
 After the initial 'drop', you 'zoom in/out' on specific details. This is where you provide more information about something that is significant to the plot. 		Pathetic Fallacy	Onomatopoeia				
Flash		Symbolism	Foreshadowing				
 The 'flash' can either be a moment of action, tension, or change in your narrative. It's a pivotal point in the story and should add a sense of excitement. 		Juxtaposition	Emotive Language				
 Echo The 'echo' is the conclusion of your narrative. It's where you provide some sort of closure to the story. The echo leaves a lasting impression on the reader and ties the piece together. 			and uses a secure range of techniques to				
Character • Appearance • Personality • Development	Use of setting	 Content is well judged, imaginative and detailed. There will be clear length, style and substance to the response. Ideas are organised and developed There is clear shape and structure in the writing Communication has clarity Accuracy Sentence structure is varied to achieve particular effects • Control of sentence construction is secure • A range of punctuation is used accurately • Spelling, including that of irregular words, is secure • Control of tense and agreement is secure • Vocabulary is ambitious and used with precision. 					

English

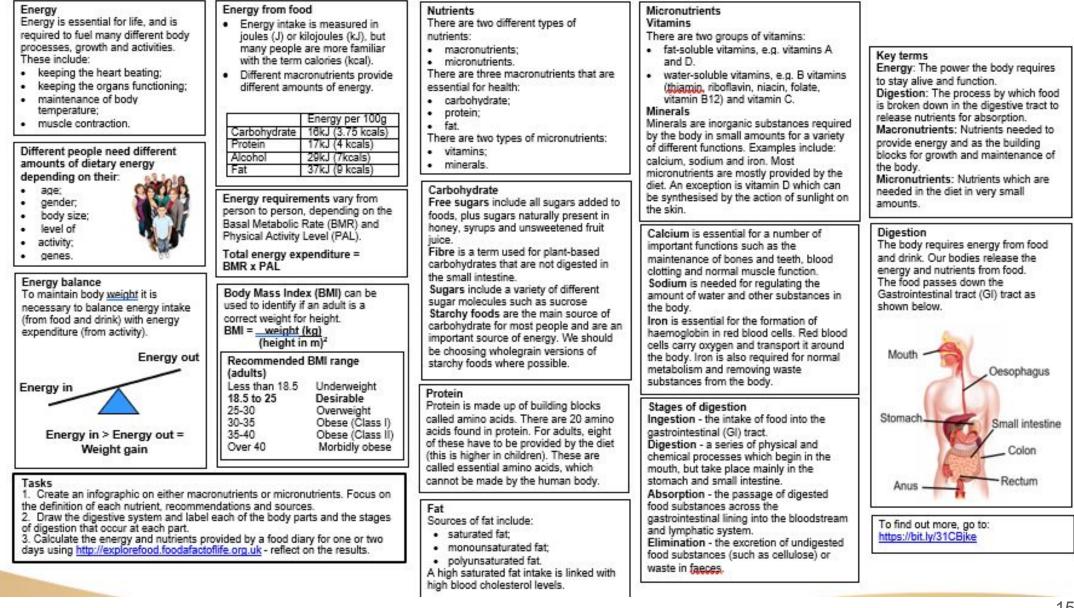
Food hygiene

Good food safety and hygiene practices are essential to reduce the risk of food poisoning.



⁻ood Technology

- Food and drinks provide energy and nutrients in different amounts, they have important functions in the body and people require different amounts during their life.
- · Digestion involves different parts of the body, each having an important role.



Year 7 Sustainable living

on-renewable energy sources? g sources of energy has taken hundreds of millions of pplies that we have on earth they d hydroelectricity do not run out,
nas t Ipplie

C. Renewable energy	Advantages	Limitations
Solar	 Available every day in all parts of the UK Solar energy can be collected even on cloudays Solar panels can be put on the roofs of hor and used to heat water in homes instead of using gas 	 The energy can't be stored unless you buy expensive batteries
Wind	 Once the turbine is in place these are chearun. Wind is free No fossil fuels are burnt Work well in windy highland areas or out a 	 Some people in the countryside complain about the noise or how they look
Hydroelectricity	 A renewable form of energy No fossil fuels are burnt 	 Only works in upland areas where there is a large river and a lot of rainfall A lot of land must be flooded to create the reservoir Dams are very expensive to build
from the proo that eats it) A lot of our fo We get more choose from Food grown a	broad is often cheaper ed for people in other countries who	carbon dioxide into the atmosphere. Helping to make the greenhouse layer thicker increasing the rate of global warming. Lots of packaging is used when transporting food to make sure it doesn't get bruised. This creates plastic waste.
 Farmers that world often d the hard worl transporters is Fairtrade is an farmers (proc a fair price foi You will see the the superman With this extr children to go help them to 	grow our food in poorer parts of the on't get paid a fair price. They do all , but the supermarkets and et most of the money. a organisation that makes sure that ucers) in poorer parts of the world get their product. re Fairtrade symbol on some goods in ket.	a fossil fuel which is running out. Plastic is getting into our oceans threatening marine biodiversity. 50% of the world's sea turtles have plastics in their stomachs. Microplastics are entering the human food chain. We are eating fish and seafood that contain microplastics. It is entering our bodies. On average we are consuming 2,000 tiny pieces of plastic every week. Plastics do not biodegrade. Most last forever. Where will all the plastic go?

FAIRTRADE

H) How can you live more sustainable?

To live in a sustainable way means that you do everything you can to try to protect the environment, save resources, and ensure that future generations can live on earth safely like we do.

To live more sustainably you could ...

- · Turn lights off when you aren't in a room to save energy
- Make sure that the TV is properly turned off and not on standby
- Don't charge your phone for longer than you need to
- Walk as much as possible rather than getting lifts in a car
- In the winter put extra layers of clothing on before turning up the heating (which burns gas)
- · Stop buying single use plastic like plastic bottles or plastic bags
- Make sure you recycle plastic wherever possible
- Always put plastic in a bin. You never know where it will end up.
- If possible, try to buy food from the UK or your local area to reduce food miles
- Is possible, try to buy food from the supermarket with the Fairtrade label on

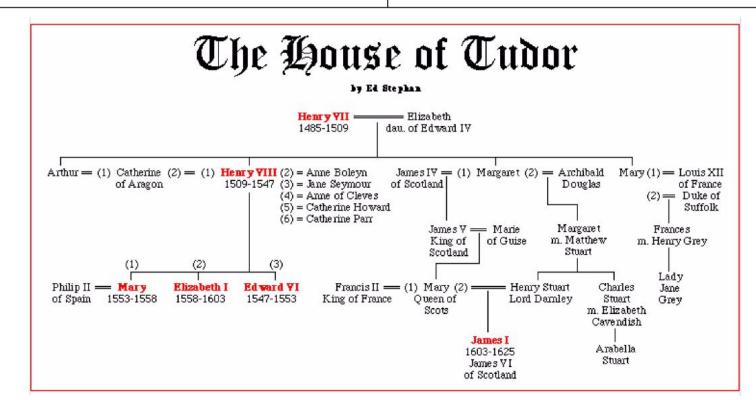
Geography

	When was the Renaissance period?	Tudor Monarchs	
	The years 1500-1700 is known as the Renaissance period. This term	Henry VII (reigned 1485–1509), followed catholic faith.	
	comes from the French word that means re-birth. This period in	Henry VIII (1509–47), followed catholic faith	
	history followed the Middle Ages where art, literature and science	Edward VI (1547–53), followed Protestant faith.	
	were re-born from the previous ideas found by the Greeks and	Lady Jane Grey (1553), followed Protestant	
	Romans. During this time period the church began to lose some of its	faith.	
	control over the people.	Mary I (1553–58), followed catholic faith.	
		Elizabeth I (1558–1603), followed Protestant faith.	
		Key words	
	Renaissance- Renaissance is a French word meaning "rebirth	Council of regency - It is a council of nobles, who after a king or queen dies with an	
	Protestant - A form of Christianity which rejects the leadership of the	heir too young to assume power, the council will assist the monarch in ruling the	
Year 7	Pope and sought to make the Church and Christian faith more	country.	
Tudor England	accessible to ordinary people.	Heresy - a belief that doesn't agree with the official points of a particular religion.	
c1485-1625	Catholic - Christianity which supports the leadership of the Pope.	Reformation - King Henry VIII's break with the Catholic Church. During the	
	Treason - The crime of betraying one's country. Showing no loyalty to	Reformation, the King replaced the Pope as Head of the Church in England,	
Ă≠¥	your country.	causing a bitter divide between Catholics and Protestants.	
A ≠ V	Religion	during the Tudor reign	
INFOLIALITY	Up until the reign of Henry VIII England had been a devout Catholic country, and had accepted the Pope as the leader of their religion. In the 1520s, Henry		
INFOUALITY	I op until the reign of Henry vill England had been a devout Catholic cou	nuy, and had accepted the Pope as the leader of their religion. In the 1520s, Henry	
INEQUALITY		ulment, to which the Pope rejected. Then in 1534, Henry declared that he, not the	
inequality بلالا	tried to end his first marriage to Catherine of Aragon by seeking an annu	ulment, to which the Pope rejected. Then in 1534, Henry declared that he, not the	
ታጚ	tried to end his first marriage to Catherine of Aragon by seeking an annu Pope, was the head of the Church in England. This sparked the English R	ulment, to which the Pope rejected. Then in 1534, Henry declared that he, not the	
	tried to end his first marriage to Catherine of Aragon by seeking an annu Pope, was the head of the Church in England. This sparked the English R	ulment, to which the Pope rejected. Then in 1534, Henry declared that he, not the Reformation. This see the introduction of Protestantism into England. Edward VI and owever, Mary I reverted back to Catholicism due to her marriage and family ties, as	
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History

17

Elizabeth I	James I
daughter of Henry VIII and Anne Boleyn, Henry's second wife. England had endured a period of instability. People had suffered economic hardship, outbreaks of disease, rebellion and poor harvests. The kingdom was also in debt. Elizabeth would have to deal with these issues and decide what to do about her government, which was mainly populated by Mary's chosen Catholics.	When Elizabeth I died in 1603 she had no heir to the throne, this then meant the crown fell to her closest living relative. James I was Elizabeth I's cousin's child. Before England's Queen Elizabeth I died she named James VI of Scotland as her successor. He united the thrones of England and Scotland when he became England's King James I in 1603. James became the first Stuart king of England.



History

SAMPLING

In statistics, a **population** is a group of people you are interested in. A **sample** is a smaller group chosen from a larger population. You can use data from the sample to make **predictions** about the whole population.

Advantages of sampling

- It is cheaper to survey a sample than a whole population.
- It is **quicker** to collect data from a sample.
- It is **easier** to analyse data from a sample and calculate statistics.

Random sample

In a random sample, every member of the population has an equal chance of being included in the sample. Here are two ways of selecting a random sample:



Put the names of every member of the population in a hat and select your sample at random.



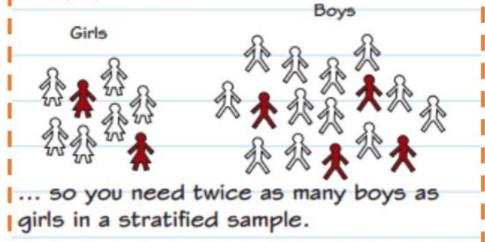
Assign a number to every member of the population and choose random numbers using a computer program or calculator.

STRATIFIED SAMPLING

What is stratified sampling?

A stratified sample is one in which the population is split into groups. The number of members selected from each group for the sample is proportional to the size of that group.

There are twice as many boys as girls in this population...



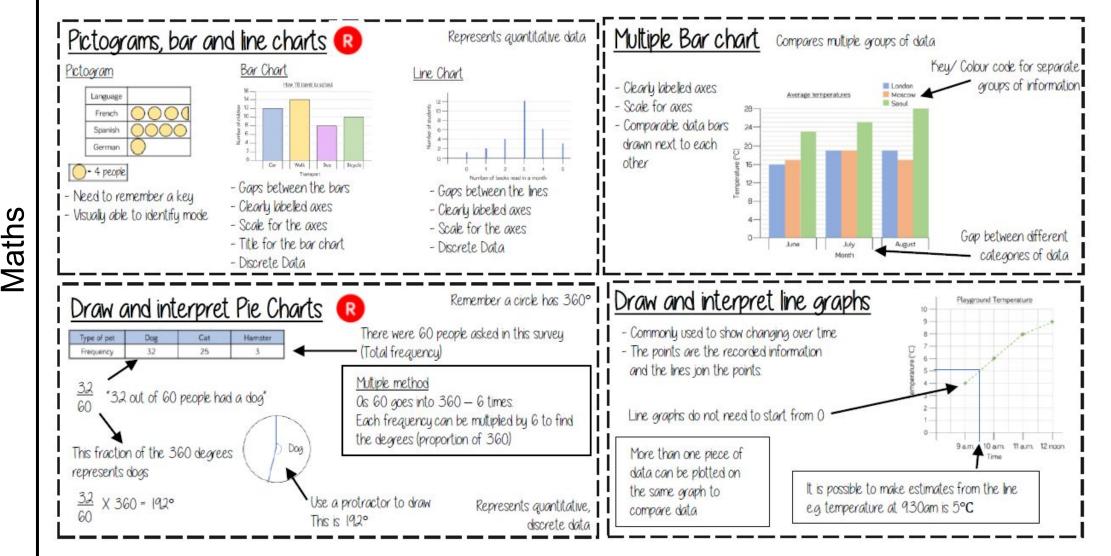
Sampling fraction Use this rule to find the sampling fraction for a stratified sample. Sample size Sampling fraction = $\frac{1}{Population size}$ You multiply the sampling fraction by the size of each group to work out how many members to select from that group. In the example on the left the sampling fraction is $\frac{6}{24}$. So you need $8 \times \frac{6}{24} = 2$ girls and $16 \times \frac{6}{24} = 4$ boys in your stratified sample.

The data handling cycle

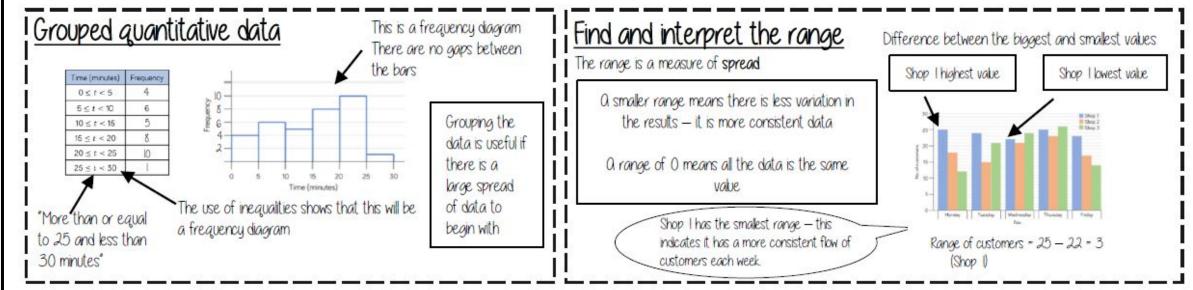
Maths

 What do I need to be able to do? By the end of this unit you should be able to: Set up a statistical enquiry Design and criticise questionnaires Draw and interpret multiple bar charts Draw and interpret line graphs Represent and interpret grouped quantitative data Find and interpret the range Compare distributions 	Keywords Hypothesis: an idea or question you want to test Sampling: the group of things you want to use to check your hypothesis Primary Data: data you collect yourself Secondary Data: data you source from elsewhere e.g. the internet/ newspapers/ local statistics Discrete Data: numerical data that can only take set values Continuous Data: numerical data that has an infinite number of values (often seen with height, distance, time) Spread: the distance/ how spread out/ variation of data Average: a measure of central tendency — or the typical value of all the data together Proportion: numerical relationship that compares two things
Set up a statistical enquiry Write a Design a Pros/ suitable data Cons of hypothesis collection sampling sheet Sheet Sheet Grouped or Data Title Tally ungrouped H H	Pros/ Discrete or Cons primary or data? secondary data Total number of that group observed Design and criticise a questionnaire The Question - be clear with the question - don't be too leading/judgemental e.g. How much pocket money do you get a week? Responses - do you want closed or open responses? - do any options overlap? - Have you an option for all responses? Zero option D. £0. D. £0.01 - £2. D. £2.01 - £4. D. more than £4. NOTE: For responses about continuous data include inequalities < x <

The data handling cycle



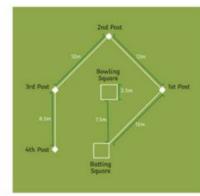
The data handling cycle



Maths

KS3 PE KNOWLEDGE ORGANISER – ATHLETICS

TRACK EVENTS		JUMPING EVENTS		THROWIN	G EVENTS
CORE SKILLS	ADVANCED SKILLS	CORE SKILLS	ADVANCED SKILLS	CORE SKILLS	ADVANCED
100m, 200m, 8	300m, 1500m	HIGH JUMP, LO	NG JUMP, TRIPLE JUMP		SKILLS
 Starting Finishing Posture Leg action Arm action Head carriage Decision m tactical awa inclu	areness, to	 Approach Synchronisation of arm and leg action Flight Landing 	 Approach: Hitting appropriate speed for take off Efficient transition between technical phases of the movements Flight: Appropriate elevation Landing movement of the body beyond initial point of contact (long jump and triple jump) 	SHOT, DISCU 1. Initial stance 2. Grip 3. Throwing action 4. Release phase 5. Recovery phase / follow through	 JAVELIN Travel: use of cross step/glide (where applicable) rotational throws (where applicable) Release phase: Appropriate angle of release Efficient transition between technical phases of the movements
 Pre-race tactics Changing and adaption Positioning in the figure pack, when to lead (where appropriat Timing of kicking figure When to dip for the of the rules and responses 	oting your race tactics field, where to run in the d and when to follow e) or the finish line e finish line Awareness gulations of the event on (including officials	 Decision making and tactical awareness, to include: Pre-event tactics Tactics for qualifying jumps/Entry height and the choice of when to 'pass' on a height/round Changing and adapting your jump tactics: Consideration of weather conditions Appropriate distance/number of steps chosen for run up In competition check mark adjustment Awareness of the rules and regulations of the event and their application (including officials commands/signals) 		ng and tactical to include: s r jump tactics: ier conditions s (Javelin only) regulations of the event and	



step out of it.

you have decided to stop.

not.

posts.

Throws:

RULES OF PLAY 1. You must start in the batting box and not

2. You only get 1 ball bowled at you, after which you must run whether you hit it or

3. You must keep in contact with a post once

4. A no ball is: above the batters head, below the knee, the wrong side of the body, too wide and too close into the body.
5. You must run around the outside of the

Underarm- used when bowling Over arm short-used to throw in between the posts to get

Overarm long- used to throw from the deep field to the posts to get the opponent out.

Year 7 PE- Rounders



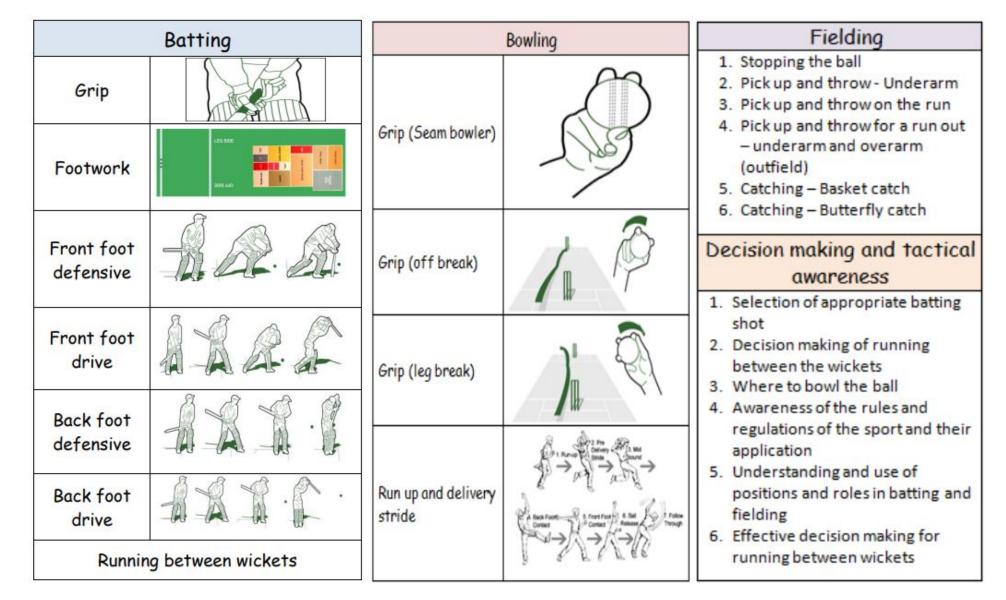
Skill/tactic	Teaching points		
Batting	 Stand sideways on to the bowler with the bat up and behind you. The arm will be in a 90 degree angle. Step in with the opposite leg. Swing through with the hips and follow through with the bat to contact the ball. Move body and arm position to hit ball in a different direction but always in front of you. DO NOT DROP THE BAT and unless the umpire shouts no ball you must run. 		
Underarm throw	Hold ball in dominant hand, step forward with opposite leg, swing arm and release ball before shoulder height. The ball must reach the batter between their knee and head. Aim for the backstop's hands. Types: Bowling- straight bowl, donkey drop, spin bowl		
Long barrier	STEP ONE Approach the ball at speed and as you get into line with the ball, twist your upper body, leading with the shoulder furthest from the ball. STEP TWO Bend both knees, so that the knee of the leg nearest to the ball touches the ground, but it is also next to the back of the heel of the other leg. STEP THREE With fingers down and head forward, pick up the ball and then stand back up ready to deliver an overarm throw. Also used in cricket.		
Catching	 You can get someone out by catching their hit or by stumping them at a post after catching the ball. Get in position under the ball, hands in a cup shape (little fingers together if ball is below the head, and thumbs together if ball is above the head). Bring the ball close into the body to ensure it is not dropped 		
CONTRACTOR OF A DESCRIPTION OF A DESCRIP	reading/videos: https://www.youtube.com/watch?v=RfXWXh5wpv4		

https://www.roundersengland.co.uk/play/rounders-rules/

the opponent out

https://www.roundersengland.co.uk/te am-locations

KS3 PE KNOWLEDGE ORGANISER – CRICKET



Ш

Main beliefs:

Jews believe in one God. They also try to live by the Ten Commandments. They include using God's name with respect, remembering the Sabbath, respecting your parents and not lying or stealing. Jews believe God gave the Ten Commandments to Moses.

Judaism began around 4000 years ago in the Middle East. Jerusalem is a place where many Jews go to on pilgrimage.

Hebrew is a special language for Jews. Jews believe God gave the Ten Commandments to Moses in Hebrew. The Torah is written in Hebrew and Jews learn to read it.

The Sabbath

The Sabbath lasts from sundown on Friday to sundown on Saturday. Jews celebrate as a family. They enjoy a special meal with prayers and songs.

What is the Torah?

The Torah is the first part of the Jewish bible. It is the vital and most important document of Judaism and has been used by Jews through the ages.

The Torah contains the five books of Moses which are known in Hebrew as Chameesha Choomshey Torah.

Jews believe that God spoke the Torah to Moses on Mount Sinai 50 days after their exit from Egyptian slavery. They believe that the Torah shows the truth about God and about their relationship with him. They also believe that the Torah show how God wants Jews to live. Since the book was shown to Moses by God it is unchanging and unchangeable.

The Torah is written in Hebrew, the oldest of Jewish languages. The word Torah has lots of meanings in English. These include: teaching, instruction and law. For Jews the Torah means all of these.

Sabbath	The holy day for Jews
Synagogue	Place of worship for Jewish people.
Rabbi	Jewish religious leader and teacher.
Torah	The Jewish holy book.
Hebrew	A language used by Jewish people.
Hannukah menorah	A special lamp with nine candles that's lit by Jews during Hanukkah.
Bar Mitzvah	A ceremony to show a Jewish boy has become an adult. It happens when a boy is 13 years old.
Bat Mitzvah	A ceremony to show a Jewish girl has become an adult. It happens when a girl is 12 years old.
Passover	When Jews remember being led out of slavery by Moses.

How is the Torah used?

When not in use the Torah is kept in a cupboard called the Ark which is usually placed on the wall in the direction of Jerusalem. In front of the Ark is the ner tamid (eternal light) burns always. The Torah scrolls are taken out from the Ark and parts are read in the synagogue three times each week. On Mondays and Thursdays small sections are read. The main reading is on the morning of Sabbath which is Friday.

The scrolls are not directly touched when unfolded on the Bimah (raised platform in middle of the synagogue). A pointer or Yad (hand) is used instead. This is in the shape of a hand with an outstretched finger. The reading or chanting is performed by a person who has been trained in this task. However it may be carried out by the rabbi. The weekly portion or Sedrah is followed by the recitation of part of another of the Jewish holy writings.

<u>The Shema</u>

Studies

Religious



A Mezuzah hangs from the door of a Jewish home

The Shema is regarded by many Jews as the most important prayer in Judaism. This is because it reminds them of the key principle of the faith - there is only one God. This is a monotheistic principle. This part of the Shema is taken from the Torah: Hear O Israel, the Lord our God, the Lord is One. (Deuteronomy 6:4).

The Shema also places emphasis on the covenant that God made with the Jewish people, the need to follow the mitzvot and the importance of loving God.

Many Jews say the Shema three times a day: in the morning, in the evening and before they go to sleep.

The Mezuzah

In many Jewish homes, the first two paragraphs of the Shema are written on a scroll and placed inside a mezuzah, which is nailed to a doorpost or gate. By touching the mezuzah every time they enter their home, Jews show their faith and love to God.



The Story of Pesach

The Jews were living in Egypt. The king of Egypt was called the **Pharaoh**. The Pharaoh had made the Jews slaves. They had to work very hard, and were very badly treated. If the slaves did not work hard enough, they were beaten with whips.

One of the Jews was a man called Moses. God spoke to Moses, telling him that he was to rescue the Jews. He went to the Pharaoh and said, 'Let my people go!' The Pharaoh refused!

But then a series of disasters happened in Egypt. They are called **plagues**. Everyone believed that these plagues had been sent by God. There were ten plagues altogether; hail, boils, darkness, flies, lice, death of cattle, rivers turn to blood, frogs, locusts and death of the eldest son. Each time there was a plague, the Pharaoh said that the Jews could go. As soon as the Plagues ended, he changed his mind and said that they must stay.

The last plague was the most terrible. The eldest son in each Egyptian family died. God warned Moses that this would happen. He told Moses to tell the Jews to put lambs' blood on the doorposts of the Jewish houses. Then the Jewish boys would not die.

The Pharaoh was so upset by the death of the boys that he said the Jews really could go. They prepared to leave as quickly as they could. Although he had said they could leave, the Pharaoh changed his mind again. He sent his army after the Jews to bring them back.

They were saved because of the water in the Sea of Reeds. It parted to allow them to cross. As soon as the Egyptian army tried to follow them, the sea flooded back and the Egyptians were drowned. <u>Shabbat</u> is when Jews remember the story found in the Book of Genesis (in the Torah) of how God made the world. **Shabbat** is when Jews remember how God made the world.

The story says that God made the world in six days, and then on the seventh day he rested. So Jews also rest on the seventh day of the week, which is **Saturday**.

The Sabbath begins on the Friday evening at sunset.

Before sunset on the Friday the house is cleaned and special food is prepared.

Everyone stops their work and **adults come home early** so that they are ready to celebrate when the sun goes down.

Sometimes the men and boys of the family will attend **an evening service at the synagogue** before coming home for the Sabbath meal.

Jews think that the Sabbath is very important. They believe that it is a special gift from God and a day of peace and rest.

Jews looks forward to the Sabbath all week. It is so special that it is sometimes called '**Queen Sabbath'.**

Science

Ecosystems

- An ecosystem is the interaction of a community of organisms with the nonliving parts (abiotic factors) of their habitat. E.g. a rainforest ecosystem contains: gorillas, ants, nut trees, lots of water and lots of sunlight
 - 2. A **population** is a group of the same organism. E.g. a group of gorillas
- A community is made of several different populations living in the same area that depend on each other for survival. E.g. populations of: gorillas, ants and nut trees

Sampling

- Random sampling is used to estimate the size of a population in a habitat
 Quadrats are
 - placed randomly and used to count the number of individuals in a



specific area e.g. estimating the total number of daisies in a field

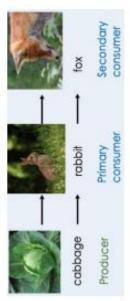
- Systematic sampling is used to investigate the effect of a factor on the distribution of organisms
- This involves using quadrats placed at regular intervals along a transect line e.g. counting the number of daisies as you move further away from a pond



Food Chains and Webs

- Feeding relationships within a community can be represented by food chains and food webs
 The direction of the arrow in a food
 - The direction of the arrow in a food chain and food web shows the direction of energy transfer

- 10. **Producers** are plants that can make their own food (glucose) using sunlight in the process of photosynthesis
- Primary consumers eat producers, secondary consumers eat primary consumers and tertiary consumers eat secondary consumers



- 12. Predators are consumers that eat
 - other animals, called **prey**
- 13. In a **stable community** the numbers or predators and prey increase and decrease in cycles
 - 14. If there is a change in one population then this affects other populations in the community. You can use a food web to predict what changes could happen

Abiotic and Biotic factors

- 15. Biotic factors are living things that can affect a community
 - 16. Examples of biotic factors are:
- food, disease and predators 17. Abiotic factors are non-living things
- that can affect a community 18. Examples of abiotic factors are: temperature, light, wind, amount of

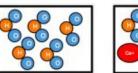
Competition

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- 19. Animals often compete with each other for space, mates and food
 - 20. Plants often compete with each other for space, water, minerals
 - 21. The best competito
- The best competitors are most likely to survive

Pure or mixture?

- A mixture consists of two or more types of atoms or compounds not chemically combined together.
- 2. A **pure** substance is made of one type of atom or compound





Pure Water

Impure water

Solutions

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- A solution is composed of a solute and a solvent.
- 4. A **solvent** is the substance a solute dissolves in.
- 5. A **solute** is the substance that dissolves in a solvent.
- A saturated solution is a solution in which no more solute will dissolve.
- An unsaturated solution is a solution in which solute will dissolve.
- 8. A substance is **soluble** if it will dissolve to form a solution.
- A substance is **insoluble** if it will not dissolve to form a solution.
- 10. A solute **dissolves** when the solute particles fill in the spaces between the solvent particles.

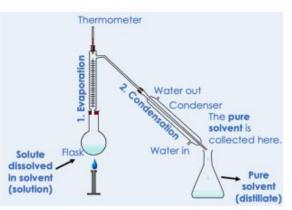
Melting and Boiling Points

- 11. **Pure** substances melt and boil at specific temperatures
- 12. Melting points and boiling points can be used to identify pure substances or mixtures

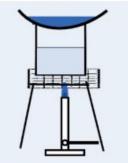
Separating Mixtures

13. Mixtures can be separated by physical processes such as filtration, crystallisation, simple distillation, fractional distillation and chromatography

14. These physical processes do not involve chemical reactions and no new substances are made.
15. In **distillation**, a solution can be separated by evaporating the solvent.



16. In **crystallisation**, the liquid is evaporated to leave behind solid crystals





17. In **fractional distillation**, the different fractions in a mixture can be separated due to their different boiling points

18. Filtration separates a solid from a liquid. The filtrate is the liquid

19. Chromatography separates soluble substances that travel at different speeds through a stationary phase

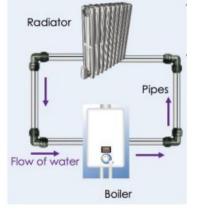


20. Rf = distance moved by substance / distance moved by solvent

21. Rf values are used to identify a substance in a particular solvent

Models of Electricity

- Electric circuits can be described using models, like a heating system.
- No model is perfect because they are not exactly the same as the real thing.



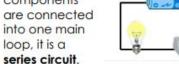
- Increasing the current in a heating system means more water is flowing through the pipes each second.
- Increasing the current in a circuit means more charges flow through the wire each second.
- 5. Turning up the temperature on a **boiler** means more thermal energy is given to the water, and the radiator gets hotter.
- 6. Increasing the voltage by adding batteries means more energy is given to the charges and the bulbs shine brighter.

Series and Parallel Circuits

- A complete circuit has no gaps, so the electricity can flow all around in a loop.
- 8. If the circuit is **incomplete**, the electricity cannot flow.

9. If all of the





 If there's more than one loop with junctions, it's a parallel circuit.



Circuit Symbol	Component Name	Function
⊢	Cell	Push charges around the
^{2.} – ⊦ ⊢	Battery	circuit. Supplies electrical energy
3	Bulb/Lamp	Lights up
4. —(A)—	Ammeter	Measures current
5. – V –	Voltmeter	Measures voltage
6. M	Motor	Spins around or moves
7.	Switch	Completes the circuit
^{8.}	Buzzer	Makes a sound

Current

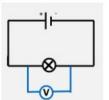
- Current is the rate of flow of charge and is measured in Amperes/Amps
 (A) by an Ammeter.
- 12. Ammeters are placed in series.
- 13. Current transfers **energy** from one place to another.
- 14. Current can be calculated using the equation:

 $Current = \frac{Charge}{Time}$

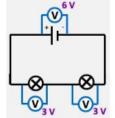
- Charge is measured in Coulombs
 (C) and time is measured in seconds (s).
- 16. The brightness of a bulb is increased by adding cells/ batteries and decreased by adding more bulbs (components).
- 17. Current is the same everywhere in a series circuit.
- Current splits at the junctions in a parallel circuit.

Voltage

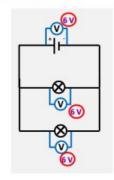
- 19. Voltage is measured in Volts (V) by a Voltmeter.
- 20. Voltmeters are connected in parallel.



- 21. Voltage is the amount of energy shifted from the power source to the moving charges, or from the charges to the circuit component.
 22. Adding voltage (adding batteries) increases the current and increases the brightness of bulbs.
 23. The voltage in a series circuit is
 - shared between components.



24. The voltage across the cell is equal to the voltage on each pathway of a parallel circuit.





Science

What will I be learning?

We will be studying Unit 3 in iClaro! This will cover:

- Likes and dislikes
- Verbs in the present tense **v**
- Sports 1
- Giving opinions
- The weather ✓

Useful vocabulary and phrases for the units:

aburrido/a apasionante difícil divertido/a emocionante fácil lento/a rápido/a me chifla me fascina... me interesa... me mola en mi opinión para mí porque

boring exciting difficult fun exciting easy slow fast I love ... fascinates me ... interests me I love in my opinion for me because

My hobbies- Mis pasatiempos

Me gusta No me gusta Odio Detesto Me encanta	I like I don't like I hate I hate I love	el tiempo ¿Qué tiempo hace? hace (mucho) calor hace frío hace sol	weather What's the weather like? it's (very) hot it's cold it's sunny
los pasatiempos bailar salsa chatear en el móvil descansar en casa escuchar música jugar a la videoconsola	hobbies to dance salsa to chat on the phone to relax at home to listen to music to play on the games console	hace viento hay niebla hay tormenta Ilueve (mucho) nieva el pronóstico el calor el frío	it's windy it's foggy it's stormy it's raining (a lot) it's snowing forecast heat cold
leer libros navegar por Internet practicar deportes salir con mis amigos ver la tele la discoteca estupendo/a favorito/a interesante	to read books to surf the Internet to do/play sports to go out with friends to watch TV nightclub wonderful favourite interesting	el invierno la lluvia la niebla la nieve el sol la tormenta el viento cuando si	winter rain fog snow sun storm wind when if
el programa el tipo	programme type		3

Spanish

Current study: School college/life

Describe tu rutina diaria.	Me levanto a y me ducho/me visto desayuno a y salgo de la casa a llego al colegio a
¿Cómo es tu colegio?	Mi colegio es muy/bastante grande/pequeño el edificio es moderno/antiguo hay profesores y alumnos. Hay muchas instalaciones, por ejemplo
¿Qué piensas de tu colegio?	Diría que mi colegio es ya que en mi opinión hay/no hay
¿Cuál es el horario del instituto?	El colegio empieza a y termina a Tenemos clases cada día y cada clase duraEn mi opinión es un día muy largo.
¿Qué haces durante el recreo?	Normalmente durante el recreo como un bocadillo/charlo con mis amigos/juego al fútbol
¿Llevas uniforme?	Desgraciadamente tenemos que llevar uniforme escolar. Tenemos que llevar En mi opinión el uniforme es
¿Qué actividades hiciste en tu colegio ayer?	Ayer fui al club de hice mis deberes jugué/practiqué/hice
¿Qué reglas hay en tu colegio?	En mi colegio hay muchas reglas, por ejemplo
¿Si pudieras, cómo cambiarías el uniforme?	Me gustaría poder llevar mi propia ropa preferiría llevar
¿Qué cambiarías de tu instituto?	Me gustaría tener un edificio más moderno cambiaría el uniforme/las reglas
¿Cómo sería tu colegio ideal?	Mi colegio ideal sería tendría habría

School building

005

А

el aula	classroom
la biblioteca	library
el campo de deportes	sports field
la cantina/el comedor	canteen/dinner hall
el gimnasio	gymnasium
las instalaciones (deportivas)	(sports) facilities
el laboratorio	laboratory
el pasillo	corridor
el patio	playground
el salón de actos	school hall
los vestuarios	changing rooms

Useful	verbs		
asistir a	to attend	intimidar	to intimidate/ bully
empezar	to start	hacer novillos	to skip a class
durar	to last	comportarse (bien/mal)	to behave well/ badly
castigar	to punish	pasar lista	to call the register
faltar	to be absent	terminar	to finish/end

Advantages and disadvantages of a

spectos positivos	Aspectos negativos
vita problemas de iscriminación.	El uniforme cuesta mucho.
odos somos iguales.	Es incómodo y feo.
s fácil vestirse por la nañana	Tenemos demasiado calor en el verano.
s práctico.	No puedes escoger la ropa.

Impersonal expression

se debe + infinitive	you must
hay que + infinitive	you have to
es esencial/necesario + infinitive	it is essential/ necessary to
hace falta + infinitive	it is necessary to
(no) se puede + infinitive	you can(not)
(no) se permite + infinitive	it is (not) permitted
se podría + infinitive	you would be able to
se debería + infinitive	you should

School problems

l acoso escolar/la ntimidación	bullying
a presión	pressure
l castigo	punishment
os profesores severos/ estrictos	strict teachers
os deberes	homework
os exámenes	exams
a falta de libertad/ espeto/instalaciones	lack of freedom/ respect/ facilities
l estrés	stress
as malas notas	bad grades
l mal comportamiento	bad behaviour
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Tememos que/ Debemos
llegar con puntualidad
llevar el uniforme correctamente
no faltar a clase
traer los materiales necesarios
no comer chicle/comer en clase
no usar el móvil
no hablar cuando el profe habla
respetar a los demás
hacer los deberes
no llevar maquillaje
no correr por los pasillos
ser educado
tratar bien a los compañeros

Useful vocabulary

el/la alumno/a	pupil
la asamblea	assembly
las actividades extraescolares	extra-curricular activities
el recreo	break
la hora de comer	lunch hour
el horario	timetable
el/la compañero/a de clase	classmate
el/la profesora	teacher
el/la directora/a	headteacher
el uniforme (escolar)	school uniform
el estudiante	student
la vida escolar	school life
las reglas/las normas	rules
la rutina	routine
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