

Year 3,4 and 5 Planning Overview 2022-2023 (Red and Green Classes)

CYCLE 1 2022-2023						
TERM	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
TOPIC	Earth & Space	Mayans	Earthquakes & Volcanoes		UK & Southampton	
Hook + Outcome	Satellite crashes on the playground. Space museum for parents to visit.	Share some chocolate and ask the children to research the history of chocolate. Children will make their own chocolates.	Lesson interrupted by an emergency warning. Mrs Baines to ask the children to research earthquakes and volcanic eruptions and produce an information display and emergency procedure should one happen in Durley. https://www.stem.org.uk/resources/community/collection/284761/earthquakes-and-volcanoes		Children will be asked to research all about Southampton as a city. They will be asked to be tour guides where they will produce a range of tasks in order to create a Southampton guide and museum. (They will look at the physical and human geography of Southampton and make comparisons with our local area).	
TRIPS/VISITS	Winchester Science Centre				Southampton	
SCIENCE	<p>Longitudinal Study: Let it Shine - explore the changing length of shadows throughout the year and the number of hours of sunlight a day. Set the study up in September and record and measure over the course of the year. Discuss the changes that take place over the year.</p>					
	<p>Space (Y5)</p> <ol style="list-style-type: none"> 1. explain how the planets in the solar system are organised (and describe them as roughly spherical) 2. describe the movement of the earth and moon, and other planets, relative to the Sun in our solar system 3. explain how the moon orbits the Earth to cause a month 4. explain how the Earth's movement causes day and night and why the sun appears to move 	<p>Food & Bodies (Y3)</p> <ol style="list-style-type: none"> 1. compare the diets of different animals 2. explain the different food groups and how they make up a balanced diet 3. describe the parts of the skeletal system and know the skeleton offers support, protection and movement 4. observe and compare animals with and without skeletons 	<p>Forces (Y5)</p> <ol style="list-style-type: none"> 1. explain why unsupported objects will fall towards Earth 2. describe the effects of air resistance, water resistance and friction (forces that act between moving surfaces cause movement to slow) 3. explain how levers, pulleys, gears and springs transmit force and motion <p>STEM - 'forces and air resistance' - 'vertically challenged'</p> <p>Scientists: Albert Einstein, Isaac Newton, Zhang Heng, Galileo Galilei Inventor: Reuben Garrett Lucius Goldberg, known best as Rube Goldberg,</p> <p>Hooks/Links:</p> <ol style="list-style-type: none"> 2. air resistance: parachutes, sycamore, gyrocopters 	<p>Super Science - Brilliant Bubbles (Y4)</p> <ol style="list-style-type: none"> 1. make and record observations 2. investigate and explain the effect of making changes to bubble mixtures 3. plan and carry out a fair test 4. identify similarities, differences or patterns in results <p>STEM - 'earthquakes and volcanoes' (inc. pulleys to rescue people after an earthquake - lifting heavy rubble easily)</p> <p>Scientists: Louis Pasteur</p> <p>Hooks/Links:</p> <p>Bubbles! Making and tasting sherbert, investigating yeast</p>	<p>STEM project - Solar Challenge</p> <p>investigate the generation of electricity by solar cells and how this can transform the lives of people without access to mains. Link to Practical Action's work in Gwanda, Zimbabwe. Solar powered fairground rides</p>	<p>Circle of life (Y5)</p> <ol style="list-style-type: none"> 1. describe the differences in the life cycles of a mammal, amphibian, insect and bird. 2. I can explain the process of reproduction in some plants and animals <p>STEM - 'Turtle Life Cycle' - 'One of the crowd'</p> <p>Scientists: David Attenborough, Jane Goodall</p> <p>Hooks/links:</p> <p>class butterflies/stick insects/ladybirds/</p>

across the sky

Super Science We are Astronauts (Y3)

5. design and make a model space rocket
6. name some famous cosmonauts and astronauts and explain what they did
7. describe some of the problems scientists have solved to help people travel into space (food, clothing etc)

STEM - Rosetta projects

Scientists:
Ptolemy, Alhazen, Copernicus.
Yuri Gagarin, Neil Armstrong, Buzz Aldrin, Valentina Tereshkova, Tim Peake

Hook/Links:
- link to school abroad - timezone difference
- Stonehenge is possibly an astronomical clock
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H&S:
- unsafe to look directly at Sun, even with sunglasses on

5. explain what a joint is and describe different types of joint
6. explain what muscles are and why they are important

STEM -

Spectacular Starch
- sourcing sugars

Scientists: Louis Pasteur, Marie Curie, Rachel Carson

Hooks/Links:
visit from nurse - model skeleton, diet and nutrition talk
healthy eating picnic
Chocolate making - link to Mayan topic

H&S:
Hazard cards: 2, 12
Mayan temple - Pyramid of Kukulcan at Chichen Itza (also known as El Castillo)

water resistance: make and test boats, blu-tac challenge
friction: ramp investigation, bike brakes
3. Rube Goldberg Challenge

H&S:
Hazard cards: 7

H&S:
Hazard cards: 2, 3, 9, 12

tadpoles/chicks!
bird nest webcam
growing seeds from parent plant/growing a plant from a cutting
roots growing on hyacinth bulb
hatch and rear chicks

H&S:
Hazard cards: 7, 8, 9, 10, 11

READING	Class Book: Iron Man Y5 A wrinkle in Time Y4 George's Secret Key to the Universe Y3 Cakes in Space	Class Book: The Chocolate Tree	Y5 Frank Einstein Y4 The Imagination Box Y3 Cliffhanger / The Firework Maker's Daughter	Related Guided Reading texts.	Class Book: Non-fiction - Awesome Engineering (fairground rides)	Related guided reading texts.
WRITING	1. INFORM: non-chron report about space 2. ENTERTAIN: Tim Peake - biography 3. INFORM/ENTERTAIN: diary aboard ISS 4. ENTERTAIN: descriptive writing of imaginary planet 5. INFORM: Newspaper report on the battle in Iron Man 6. INFORM: How does a telescope work	1. DISCUSS: should the cacao bean have been kept just for the gods? 2. ENTERTAIN: adventure quest story 3. PERSUADE: poster to advertise your chocolate	1. ENTERTAIN: figurative poetry on topic of earthquakes and volcanoes 2. PERSUADE: formal letter to council persuading them to evacuate an area due to earthquake/volcano 3. INFORM: explanation of how a Rube Goldberg invention works	1. INFORM: Newspaper report about a natural disaster 2. DISCUSS: should people live near fault lines and active volcanoes? + writing linked to residential trips	Tourist Guide to Southampton.	Biographies of famous British monarchs.
Geography		Where did the Mayans live? Locating the world's countries - South America.	1. use maps, atlases, globes and digital/computer mapping to locate countries where Earthquakes and Volcanoes can be found 2. Describe and understand key aspects of physical geography, including: volcanoes and earthquakes		Use maps, atlases, google maps to locate Southampton. Locate countries, counties of the UK. Add the human and physical features of Southampton to a map. Research the human and physical features of Southampton and compare them to our location.	
History		1. Understand the historical chronology of the Mayans 2. Identify how aspects of the Mayan civilisation including scientific advancements have influence modern life in the UK . Mayan history box			The Monarchy	
Art	Peter Thorpe (Space Art - chalks and oil pastels)		Frida Kahlo (Portraits, drawing people and their different features, sketching)	Jackson Pollock (Abstract art - dripping, pouring, splattering techniques)	Artist Study - Kandinsky Colour wheels and colour mixing, collage	Lichtenstein - Cartoon style, use of primary colours, pop art
DT		Food Tech - STEM (Healthy Diet unit)	Papier mache volcanoes			

RE	CREATION/FALL – LKS2 Unit: What do Christians learn from the creation story? (Digging Deeper) Community	INCARNATION/GOD – LKS2 Unit: What is The Trinity? (Digging Deeper) SU Hinduism - Diwali	LD1V: Buddhism – Peace and Buddharupa SPECIAL	SALVATION – LKS2 Unit: Why do Christians call the day Jesus died ‘Good Friday’? (Digging Deeper) LOVE	INCARNATION/GOD – LKS2 Unit: What is The Trinity? Trinity focus (Trinity Sunday) Baptism with Gregg BELONGING	LD1V: Buddhism – Messages SU: Kingdom of God KS2 Unit (Pentecost)
PSHE	Me and My Relationships Families & Friendships Safe Relationships	Valuing Difference Respecting ourselves & others	Keeping Myself Safe Belonging to a Community Media Literacy and Digital Resilience	Rights and Responsibilities Money and Work	Being My Best Physical Health and Mental Wellbeing Growing and Changing	Growing and Changing Keeping Safe
Computing	We are Programmers Programming an animation with a theme of ‘Earth & Space’	We are bug fixers Finding and correcting bugs Online Safety completing the online safety program	We are artists Fusing geometry and art using a theme of earthquakes and volcanoes	We are meteorologists Presenting the weather	We are Geologists Making sense of the Internet and building a website, linked to the topic of the UK and Southampton	We are architects Create a virtual space, for example a virtual museum linked to UK and Southampton topic
Music	Solar System (Year 5)	Mayan Music	Poetry (Year 4) & China (Year 3)	Our Community (Year 5)	Time (Year 4)	Celebration (Year 5)
PE	Year 5 - Dance - Earth and Space. Y3/4 Swimming (7 weeks)	Gym - stretching, curling and arching (Y3 unit)	Dance - Volcanoes (Val Sabin Y5 unit)	Gym - Rolling (Y4 unit)	Dance - Fairground	Gym - Spinning and Turning (Y5 unit)
French	Weather and Seasons		Fruit and Vegetables		Y3/4 - Family & Friends. Y5 - Let's visit a French town.	