

Half-termly planning overview Year 4 - Spring Term 2



Enquiry question: What are the cycles of our Solar System?

Harmony principle: The principle of the Cycle

Sustainability action: Leading an 'Earth Hour' for the school community

Great Work: An assembly on the awe and wonder of our Solar System

Partners in learning: Local observatories; mobile planetarium; Science Museum



Weekly Questions

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
	Why do we have cycles of day and night on Earth?	How does the lunar cycle work?	Why is the Earth spherical and how does gravity work?	Why do we have the cycle of the seasons on Earth?	What are the cycles of the other planets that orbit the Sun?	What are the cycles of our Solar System?
GEOMETRY	Why do we have cycles of day and night on Earth?	What are the phases of the Moon?	What are the relative sizes of the Earth and Moon? (11:3 ratio)	Why do we have the cycle of the seasons on Earth?	How big are the planets in our Solar System?	How can I recreate the orbit of Venus?
SCIENCE	How is the cycle of day and night related to the rotation of the Earth?	What is the lunar cycle? Why does the Moon look different to people in different locations?	How can I investigate the effect of gravity on an object?	How does the Earth's orbit around the Sun affect the cycle of the seasons?	What can I learn about different planets and how they orbit the Sun? What are their cycles?	What have we learnt so far from space exploration?
ENGLISH	How will I bring night and day to life in two contrasting setting descriptions?	What will I include in a poem about what happens in nature at night?	How will I describe my adventure on the Moon?	What will I include in a diary entry about life on a space station?	What will I include in an information text about one of the planets in the Solar System?	How will I present my information text in an engaging way as a page of a book?
GPS FOCUS	How will I use adverbials to help me create cohesion within a paragraph?	What adverbials will help me create cohesion within a poem?	How will I use inverted commas to punctuate the speech in my adventure story?	How will I use adverbials to express 'how, when, where and why' in a diary entry?	How will I use apostrophes to describe a planet's attributes?	How will I use paragraphs to organise information in a text?
MATHS	How many minutes are there in a day?	When in the year is the longest night?	How will I present data from my gravity investigation?	How does the Earth's temperature change through the seasons?	How can we order the planets in size and distance from the Sun?	What is the temperature on different planets? (-ve numbers)
ART & DESIGN	How can I use oil pastels and watercolour paint to create an Earth artwork?	How will shading help me to show the craters of a lunar landscape?	How can I use collage to create a magnified section of a chondrite? (1)	How can I use collage to create a magnified section of a chondrite? (2)	How will I work as part of a group to create an artwork of a planet to scale? (1)	How will I work as part of a group to create an artwork of a planet to scale? (2)
COMPUTING	How will I design a simulation of the Earth orbiting the Sun using a program?	Is my simulation successful so far? What do I need to change?	How will I add the orbit of the Moon to my simulation?	How will I debug a simulation of the Earth and Moon orbiting the Sun?	What do I need to do to add further planets to my simulation? (1)	What do I need to do to add further planets to my simulation? (2)
PE (GYMNASTICS)	How can I move through 360 degrees? (rotations and rolls)	How can I move 'in orbit' with a partner?	How can we work in pairs to create partner balances?	How can I jump like an astronaut?	How can we link moves in a space-inspired gymnastics sequence?	How can we perform and evaluate our space-inspired gymnastics sequence?
HISTORY	How have images of the Earth from space changed the way we think about our planet?	Who were the first people to visit the Moon?	Who has explored space?	Who is Helen Sharman and what is life like on a space station?	What evidence will I use to present information on one aspect of the Space Race?	How will I present what I have found out about a significant figure in the Space Race?
PSHE	What does the cycle of a day (and night) in my life look like?	What cycles do we see in the life of our school?	What cycles do we see in our learning? How do they help us?	How are some cycles in our feelings unhelpful and how can we break them?	What other cycles should we break?	How can cycles help us to look after our planet?
MUSIC	How did Coldplay represent space in <i>Music of the Spheres</i> ?	How will we represent an aspect of space in a composition? (1)	How will we represent an aspect of space in a composition? (2)	How will we use notation to write down our composition?	How did Gustav Holst represent the planets in music? (1)	How did Gustav Holst represent the planets in music? (2)
OUTDOOR LEARNING	Creating a simple sundial	Finding out why the Moon has craters using flour, oil and small rocks	Building and testing a Lego or balloon-powered space rover	Enact the orbits of the Earth, Moon and Sun	Solar system 'Who am I?' game in the playground	Use geoboards and wool or blu tack and sticks to make constellations