

Space Topic Overview



Science

1	What is the solar system? <ul style="list-style-type: none"> - Defining the solar system and what it contains - Exploring what the sun is and finding out facts about it - Examining objects in the solar system (stars, planets, asteroids, comets, etc.)
2	Why do we have day, night and seasons? <ul style="list-style-type: none"> - Exploring how the rotation of the earth around the sun creates night and day - Looking at how the tilt of the earth on its axis creates seasons
3	What is the moon and why does it change shape? <ul style="list-style-type: none"> - Defining what the moon is - Exploring the phases of the moon throughout the lunar month and why the moon appears to change shape at different times
4	What planets are there in the solar system? <ul style="list-style-type: none"> - Finding out the names of the planets in the solar system - Exploring facts on the planets (size, distance from the sun, composition, number of moon, etc.)
5	What are stars and constellations? <ul style="list-style-type: none"> - Defining a star and examining their different life stages - Exploring the names and shapes of some of the most famous constellations

History

1	Who invented the telescope and what effect did it have? <ul style="list-style-type: none"> - Exploring how and when the telescope was invented - How telescopes work - Galileo's development of the telescope and the effect it had on astronomy
2	What was the Space Race? <ul style="list-style-type: none"> - Examining the Space Race between the USSR and USA - Developments in space exploration between 1940 and 1970
3	Who was the first to land on the moon? <ul style="list-style-type: none"> - Exploring the details of the Apollo 11 mission of 1969 - Exploring who was involved in Apollo 11 and how they felt to land on the moon
4	How do astronauts explore space today? <ul style="list-style-type: none"> - Examining methods of space exploration used today (space shuttles, the Hubble Telescope, satellites, observatories, space stations)

ICT

1	How can I use ICT to research and write the biography of a famous astronaut? <ul style="list-style-type: none"> - What is a biography and what does it need to include? - Using the internet to find information about a particular person - Use word processing to create a biography
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Art

1	Making an origami star <ul style="list-style-type: none"> - What is origami? - Working with paper to create an origami star - Designing and planning use of colour and patterns to create an effect
2	Creating a fictional planet using different media <ul style="list-style-type: none"> - Creating a mental image of a fictional planet - Using a variety of media to represent a fictional planet

RE

1	The Big Bang vs Creation Stories <ul style="list-style-type: none"> - Why are there different explanations for why the universe began? - What is the Big Bang theory? - Exploring the Christian creation story and creation stories from other cultures - Can the Big Bang theory and the Christian creation story be true? What do you believe?
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Design & Technology

1	Making a sundial <ul style="list-style-type: none"> - Exploring examples of sundials past and present and what they are used for - Designing, making and evaluating a sundial
2	Making a model of a spaceship <ul style="list-style-type: none"> - Examining different types of spacecrafts, both real and fictitious - Examining the components of a spaceship - Designing, making and evaluating a model of a spaceship

Music

1	Composing a piece of music to represent the journey of a spaceship <ul style="list-style-type: none"> - What are the stages in a spaceship's journey? - How can we create different sounds using tuned and untuned instruments? - Composing and recording a composition to represent the journey of a spaceship
2	Listening and responding to Holst's <i>The Planets</i> <ul style="list-style-type: none"> - Who was Holst? - Examining the astrological characteristics of the planets and how Holst reflected this in his work - Listening to music and exploring what children think of the different movements

Further suggestions:

Design & Technology

1	Create a scale model of the planets using different sized balls or circles of card
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ICT

1	Gather data about the planets (size, distance from the sun, distance from Earth, number of moons, etc.) and use the information to create databases and graphs
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Art

1	Use marbling to create pictures of the planets
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Space Topic Overview



Understanding English, communication and language

- Using information texts to answer questions
- Writing newspaper reports on important events of the past
- Writing a playscript about the invention of the telescope and Galileo's role in the advancement of astronomy
- Writing a recount of Apollo 11's mission to the moon from the point of view of Neil Armstrong
- Preparing and performing a TV news report about man's first landing on the moon
- Creating a poster to show people explore space today
- Using the internet to research a famous astronaut
- Exploring the features of biographies
- Writing a biography for a famous astronaut
- Using adjectives and descriptive language to show the stages in a spaceship's journey
- Using role-play to show the differences between scientific and religious explanations for how the universe began
- Writing a creation story to reflect personal beliefs for how the universe began
- Using mnemonics to remember the order of the planets

Understanding the arts

- Following a specific process to create an origami star
- Exploring how to make patterns using graphics programmes
- Creating a mental image of a fictional planet and using a variety of media to portray this through art
- Exploring the use of colour, tone and texture to create an atmosphere
- Exploring how different instruments and sounds can be used to portray events and emotions
- Composing a piece of music to portray the journey of a spaceship
- Rehearsing, performing and evaluating a composition
- Listening and responding to Holst's 'The Planets'
- Exploring how Holst conveys the astrological characteristics of planets through music

Mathematical understanding

- Solving problems involving different time zones
- Using Venn and Carroll diagrams to classify planets

Understanding physical development, health and well-being

- Exploring why different people have different opinions and points of view about how the universe began

Historical, geographical and social understanding

- Finding out when the telescope was invented and how it changed astronomy
- Using a timeline to explore the events of the Space Race
- Using a variety of historical sources to answer questions about the history of space exploration
- Finding out about the events surrounding man's first landing on the moon through a variety of sources
- Exploring ways in which astronauts and scientists explore space today and how this is made possible through the contributions of people in the past

Scientific and technological understanding

- Exploring examples of sundials and what they are used for
- Designing, making and evaluating a sundial
- Studying examples (real and fictional) of spacecrafts and their components
- Designing, making and evaluating a model spaceship using a variety of materials and techniques
- Investigating the solar system and what it contains
- Exploring why we have night, day and seasons
- Exploring the features and phases of the moon
- Creating a diagram to show each phase of the lunar cycle
- Exploring the features of the planets in the solar system
- Defining a star and exploring the phases in a star's life
- Exploring constellations through star charts