

Our Learning Journey through the Topic

Where is the Earth in relation to the Sun and the Moon?
Where is it, how big are they and how do they move?

How do the planets move in the solar systems?
How are they relative to one another?

Case Study: Research into a known planet

Educational Visit: Jodrell Bank

Why do we have different seasons?

Why are there different phases of the moon?

Why is there night and day?

How could we model the motion of the Solar System?

Which countries were involved in the space race?
What were the key events to landing the first man in space and on the moon?

Case Study: write from a point of view from either a known astronaut or astronaut.

Out of this World

How has space been replicated through art?

Out of this World

Term taught in:	Autumn 1	Number of Weeks:	7
Objectives		Outcomes	
<p>Science</p> <ul style="list-style-type: none"> Describe the movement of the Earth, and other planets, relative to the Sun and each other in the solar system. Describe the movement of the Moon relative to the Earth. Use the idea of the Earth's rotation to explain day and night. Use the Earth's movement in space to explain the apparent movement of the sun across the sky. 	<p>Your child will:</p> <ul style="list-style-type: none"> Describe the relationship between the Earth, sun and moon. They will be able to discuss the Earth as roughly spherical and explore historic understanding of our solar system; developing their understanding of flat earth theory, heliocentric and geocentric models. Create an orrery to demonstrate their understanding Keep a moon diary. They will draw the phases of the moon and model how they occur. Use create a model of the Earth spinning on its axis. They will demonstrate how this creates night and day and begin to develop an understanding of time zones. 		
<p>History</p> <ul style="list-style-type: none"> Analyse links and contrasts within and across different periods of time including short-term and long-term time scales. Develop chronologically secure knowledge of the events and periods of time studied. Demonstrate knowledge of an aspect or theme in British history that extends their chronological knowledge beyond 1066. Use dates and a wide range of historical terms when sequencing events and periods of time. Describe the impact of historical events and changes. Regularly address and sometimes devise historically valid questions and hypotheses. Give some reasons for contrasting arguments and interpretations of the past. Choose the most appropriate way of communicating different historical findings Construct informed responses to historical questions and hypotheses that involve thoughtful selection and organisation of relevant historical information including appropriate dates and terms. Use appropriate vocabulary when discussing, describing and explaining historical events. Acknowledge contrasting evidence and opinions when discussing and debating historical issues. 	<p>Your child will:</p> <ul style="list-style-type: none"> Create a timeline of the events which led up to the 'Space Race'. During this 'Out of this World' topic, we will add further key events to the timeline and consider how these people and events fit into a chronological framework. Discuss and evaluate propaganda posters, making simple inferences and considering their validity as a historical source. Demonstrate our understanding of the relationship between America and Russia - during the Space Race - by creating a diary entry for a Russian cosmonaut and American astronaut. 		

<p>Art</p> <ul style="list-style-type: none"> • Investigate a range of starting points for their work, and choose which idea to develop further. • Record their thoughts and experiences in a sketch book / 'ideas journal', and annotate these in order to aid the development of their ideas. • Explain how they are developing their ideas as they work and use language appropriate to the chosen art form. • Use creative thinking to adapt an initial idea, e.g. experiment with alternative colour palette. • Critically analyse the styles of artists, craft makers or designers and use this to inform their own work. • Use sketch book 'ideas journal' to evaluate and adapt their work as their ideas develop; make annotations in their books to show their ongoing evaluations and how they might develop their work further. • Understand how a chosen artist or art form has contributed to the culture and / or history of a specific nation. • Describe what they think and feel about their own and others' work and how this might influence their designs. • Use their knowledge of drawing, painting, sculpture and other art, craft and design techniques to work creatively e.g. adapting the style of an artist to create their own effect. 	<p>Your child will:</p> <ul style="list-style-type: none"> • Critically analyse the work of artist, Peter Thorpe. They will use art sketch pads to develop their ideas and experiment with colour pallets. • Adapt the work of Peter Thorpe to create their own abstract space artwork. • Use digital art (Brushster) to create a background for their abstract artwork. Editing and evaluating as they develop their work. • Select their own media to develop a space object for the foreground of their abstract artwork. They will consider both the colour and proportions of the foreground in combination with the digital background. • Evaluate our own work and our peers, discussing the original inspiration and how we feel about our completed piece.
<p>Geography</p> <ul style="list-style-type: none"> • Name and locate an increasing range of places in the world including globally and topically significant features and events. 	<p>Your child will:</p> <ul style="list-style-type: none"> • Locate Russia and the USA on a World map - they will be able to identify key cities and physical features.
<p>Design Technology</p> <ul style="list-style-type: none"> • Decide which design idea to develop. • Sketch and model alternative ideas. • Use models, kits and drawings to help formulate design ideas. • Record ideas using annotated diagrams. • Select from and use a wide range of materials. • Cut accurately and safely to a marked line. • Develop one idea in depth. • Investigate key events and individuals in design and technology. • Consider and explain how the finished product could be improved related to design criteria. • Consider user and purpose. • Use mechanical systems such as cams, pulleys and gears. 	<p>Your child will:</p> <ul style="list-style-type: none"> • Critically analyse a variety of orrery's through history. • Design and construct their own orrery - using a range of materials and tools. • Evaluate their own product.

<i>Key Vocabulary</i>		<i>End Products</i>	
<p><u>Key topic specific vocabulary</u></p> <p>Orbit Solar system Planets - Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune Axis Orrery Phases of the moon - crescent, gibbous, Heliocentric Geocentric</p>		<ul style="list-style-type: none"> • Represent the distance between planets through scaled diagrams. • Present research and the understanding of the planets in different non-fiction formats • Use secondary sources included an educational visit. • Construct a mechanism to represent the orbit of the Earth, Sun and Moon. • Understand the history of the Space Race and the impact of future space adventures. • Represent space through different artistic mediums. 	
<i>Links to our School Values</i>		<i>Links to British Values</i>	
<p>Trying Your Best Communication Compassion Honesty Resilience</p>		<p>Being Part of Britain Democracy. The rule of law. Individual liberty. Mutual respect. Tolerance of those of different faiths and beliefs.</p>	
<i>Cross Curricular Opportunities</i>	<i>Enhancements</i>	<i>Misconceptions</i>	
<p>English:</p> <ul style="list-style-type: none"> • Science Fiction Genre taught alongside this unit • Write an first-person recount (diary) 	<p>Trip to Jodrell Bank</p>	<p><i>Please note if there were any misconception that would need noting for next year.</i></p>	