



Oratory REAL Project Overview Spring

'Shine as to be a light to others'



Year: 5 Teacher: Mrs Hall, Mr Paine Teaching Assistant: Mrs Westley

Project Name	Project Summary	Essential Question
Space	Children will be introduced to the topic by discussing the planet earth and the solar system. The children will visit Think Tank. We will then take this theme throughout all our topics and explore space and technological developments (past and present) related to space exploration. Our exhibition will be to design and make our own planetariums and invite parent/carers in to showcase these, make constellations stories and showcase our learning.	What would happen if it was always night time?

How will your children meet the 4 components of effective REAL Projects?

RIGOROUS	ENGAGING
<p><i>How will the children show in depth subject knowledge?</i></p> <p>Through the work produced in their books and through other work displayed through Art and DT. They will show understanding of Space through making planetariums from two different mediums and presenting their learning to parents and carers in a range of ways.</p>	<p><i>How will your children engage in the learning?</i></p> <p>The project launch will involve children visiting the National Space Centre in Leicester. A mobile planetarium will also come to school.</p>
AUTHENTIC	LEARNING
<p><i>What will your authentic audience be? Could they take on an authentic role?</i></p> <p>The children's exhibition will be a tour of two different planetariums that they will have designed and made. They will showcase their learning and their findings from their exploration of space. They will also create constellation stories with their parents/carers.</p>	<p><i>How will your children show their learning of content and key skills in this project?</i></p> <p>Through final drafts of work, which have been teacher, self and peer assessed throughout.</p>

REAL Project Planner Spring

Project Start	Project End
January 2018	March 2018

Key Outcomes	Trips and Experiences	Immersion – Classroom
<ul style="list-style-type: none"> -Exploration of Space-past and present. - Rocket Modelling - Rocks and Soils - Space -Constellation exploration -Mapping of the Moon -Design and making planetariums 	<ul style="list-style-type: none"> -Trip to Leicester National Space Centre - Travelling Planetarium visit in school hall- Birmingham planetarium- Immersive Theatres 	<ul style="list-style-type: none"> -Space themed classroom. -Rocket - Solar System - Astronaut - Black Material with starry night lights -Nasa Centre. A working space for children to complete tasks.

Exhibition Venue	Exhibition Plan
School Hall	<p>Planetarium tours, designed and made by Year 5.</p> <p>Children will take their parents and carers on a tour of space and the night sky.</p> <p>Children will create posters advertising the play. They will have to sell tickets and invite parents, family, teachers and peers to come and watch their show.</p>

Weekly REAL Project Planning Spring 2018

Date	Key Outcomes	Milestones and Skills
<p>Week 1 8th – 12th Jan</p> <p>Key Questions:</p> <p>What are the three major spheres of Earth?</p>	<p>Project Launch – Trip to National Space Centre. Start reading ‘Cosmic’</p> <p>English Writing- Biography Maths- Equivalent Fractions Art- Moon Art- flour and paint on sponge Science- Solar System, Planets R.E- The Epiphany –Bethlehem Star and possible explanation (conjunction, shooting star, angel, comet or super nova).</p>	<p>English: To organise writing appropriately</p> <p>Maths: Compare and order fractions whose denominators are all multiples of the same number. -Compare and order fractions, including fractions > 1.</p> <p>Art: Mix textures (rough and smooth, plain and patterned). -Combine visual and tactile qualities.</p> <p>Physicists: Describe the Sun, Earth and Moon as approximately spherical bodies -Describe the movement of the - Earth, and other planets, relative to the Sun in the solar system.</p>
<p>Week 2 + 3 15th – 19th Jan 22nd – 26th Jan</p> <p>Key Questions:</p> <p>How does Space contribute to time, days, months, years, seasons?</p>	<p>Historic Moments in Space Earth, Sun and Moon</p> <p>History-Real life Space Exploration History- First Man on the Moon English- Biography Writing- Characterisation and Settings related to novel Study ‘Cosmic’. Maths- Fractions Art- Moon Art- flour and paint on sponge Science- Record data using models- Earth, Sun and Moon Take measurements with increasing accuracy and precision. - Make moon rocks and moon dust -Oxygen-Photosynthesis-Sun Maths- Time linked to Space. Day/Night/months/years/ Calenders Geo-Moon Mapping R.E- Creation God’s presence in creation (Pslam 147:4) God’s Glory in creation (Sirach 43:9-12)</p>	<p>History: Use sources of evidence to deduce information about the past.</p> <p>English: Plan, draft, write, edit and improve.</p> <p>Reading: Draw inferences such as inferring characters’ feelings, thoughts and motives from their actions, and justifying inferences with evidence.</p> <p>Maths: Use common factors to simplify fractions; use common multiples to express fractions in the same denomination</p> <p>Physicists: Use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky.</p>
<p>Week 4 + 5 29th – 2nd Feb 5th – 9th Feb</p>	<p>Rockets and space exploration</p> <p>English- Story ‘Alien Landing’ Maths-Fractions Science- Balloon Rocket Launch Art/D.T - Mini Rocket Models</p>	<p>English: Write fluently and legibly with a personal style.</p> <p>Maths: Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</p>

<p>Key Questions: If we didn't have the sun to create photosynthesis, how would we breathe?</p>	<p>R.E- Awe and Wonder 'What can space tell us about Space?' Computing –Learn Pad Animation</p>	<p>Reading: Draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.</p> <p>Physicists: Look at the effect of gravity and drag forces.</p> <p>Art: Combine visual and tactile qualities.</p>
<p>Week 6 12th-16th Feb</p> <p>Key Questions: How does technology help us learn?</p>	<p>Rockets and space exploration</p> <p>English- Explanatory Writing-Solar System Maths- Fractions Art/D.T- Large Rocket Models with carpet roll inserts. Science-Moon Phases Computing –Learn Pad Animation</p>	<p>English: Guide the reader by using a range of organisational devices, including a range of connectives.</p> <p>Maths: Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</p> <p>Physicists: Look at the movement of the Earth and the Moon.</p> <p>Art: Combine visual and tactile qualities.</p>
<p>Half Term</p>		
<p>Week 7 + 8 26th-2nd March</p> <p>5th-9th March</p> <p>Key Questions: -Why can't humans breathe in space like they can on Earth? -What is a galaxy?</p>	<p>Mars</p> <p>English- Newspaper Report-Landing on Mars. Maths- Fractions Science- Eclipses and seasons -Space Food Geography/History: Mission to Mars Art- Mars Landscape Paintings R.E- Awe and Wonder: Worshipping the Creator (Deuteronomy 4:19) Computing –Learn Pad Presentation app</p>	<p>English: Interweave descriptions of characters, settings and atmosphere with dialogue.</p> <p>Maths: Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</p> <p>Art: Use brush techniques and the qualities of paint to create texture. - Develop a personal style of painting, drawing upon ideas from other artists.</p> <p>Geo/His: Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location.</p>
<p>Week 9 13th March-17th March</p> <p>Key Questions:</p>	<p>NASA</p> <p>English- Alien Play-scripts Maths- Perimeter, Area and Volume Science-Stars History: NASA- Space Propaganda The Space Race</p>	<p>Reading: Guide the reader by using a range of organisational devices, including a range of connectives.</p> <p>Maths: Recognise when it is possible to use formulae for area</p>

<p>- Where and what is Nasa? -Tell me about Nasa's most famous telescope?</p>	<p>R.E- Revelations: And his kingdom will have no end (Daniel 12:2-4) (Revelation 5:5 6:14)</p> <p>Computing –Learn Pad Presentation app</p>	<p>and volume of shapes.</p> <p>History: Compare some of the times studied with those of the other areas of interest around the world.</p> <p>-Describe the social, ethnic, cultural or religious diversity of past society.</p>
<p>Week 10 12th -16th March</p>	<p>Exhibition</p>	<p>Tour of two different planetariums that will have been designed and made by year 5. They will showcase their learning and their findings from their exploration of space. They will also create constellation stories with their parents/carers.</p>