



Out of this World Year 6

Essential Knowledge

By the end of this unit children will know...

- Key features and planets of our solar system including facts about environment and conditions.
- Which countries and nationalities have space programmes and how these programmes pioneered and developed space exploration?
- How day and night are created by the earth's rotation.
- What life is like on the International Space Centre including lifestyle, diet, expeditions etc.

Launch

What do the pupils already know about space?
 What do they want to learn about the universe and our solar system?

Explore

Aliens crash land in school grounds. Interview with reporters about what children think have happened. Interview local resident detailing what they hears/saw.

Energise

Mission to Mars: Official launch day of rockets built by children. Children are to dress up astronauts and launch their rocket models after day of preparation where children decide what necessities they will need for their journey into space.

Celebrate

Pupils' work will be displayed for all to see!

Core Subjects:

Links to theme

English

- Children to write a script for their newspaper report about our Explore day.
- Children to write diary entries to detail their life in space.
- Children to write a balanced argument on whether we should spend so much money exploring our universe rather than improving living standards?

Mathematics

- Children make to-scale models of our solar system.
- Children to calculate distance to several planets and work out the amount of fuel required.

Science

N/A

Out of this World Year 6: Theme Content

Personal Development

Spiritual

- Is scientific advancement at odds with the teachings of the bible?

Moral

- Children to debate whether we should spend so much money exploring our universe rather than improving living standards?

Social

- Children work collaboratively in groups to research life on the international space station and conditions on different planets.

Cultural

- Children to research and discuss the meaning of the word alien in modern society and how it is used to signify a clash of cultures.

Foundation Subjects

History, Geography and Citizenship

History:

- Space race– timeline of journeys to space
- Focus on key figures from the space race e.g. Neil Armstrong, Buzz Aldrin and Yuri Gagarin
- Children to research ‘Space Disasters’ e.g. Challenger Mission 1986, Apollo 13.

Geography:

- Children to research and plot the different launch site around the world
- Children to find out about different countries that have space programmes— which have launch capability?
- What nationalities are represented in the International Space Centre? How do they effectively communicate with each other?

Art and Design and Design Technology

- Children to work in groups to create a model solar system.
- Children to design and make their own rocket.
- Children use coloured chalks to recreate the atmospheric landscape of different planets.

Music, Languages and Physical Education

- Children to create a theme tune for the children’s rocket launch.
- Children to create expressive dances to mimic alien life forms.
- Children to study the Planet Suite by Gustav Holt.

Out of this World Year 6: Links to National Curriculum Framework

Core Subjects:

English

- Ask questions and make suggestions to take an active part in discussions.
- Chose the appropriate form in writing using the main features identified in reading.
- Create vivid images using alliteration, similes, personification and metaphors.
- Debate using relevant ideas to support points.
- Negotiate and compromise by offering alternatives.
- Identify the audience for the writing.
- Note, develop and research ideas.
- Plan, draft, write, edit and improve.

Mathematics

- Describe positions on the full coordinate grid.
- Convert between different units of metric measure.
- Understand and use approximate equivalence between metric units and common imperial units such as inches, pounds and pints.
- Solve problems involving similar shapes where the scale factor is known or can be found.

Science

- N/A

Foundation Subjects

History, Geography and Citizenship

History:

- Understand the concepts of continuity and change over time, representing them, along with evidence, on a timeline
- Use dates and terms accurately in describing events
- Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children
- Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural).

Geography:

- Create maps of locations, identifying patterns
- Describe and understand key aspects of physical geography of a place
- Understand some of the reasons for geographical similarities and difference between countries

Citizenship:

- Generate lots of ideas and show a willingness to be wrong

Religious Education:

- Explain their own ideas about the answers to ultimate questions
- Explain why they own answers to ultimate questions may differ from those of others

Art and Design and Design Technology

- Art and design: To use a variety of techniques to add interesting effects (e.g. reflections, shadows, directions of sunlight).
- Design technology: Use frameworks such as wire or moulds to provide stability and form.
- Design with the user in mind, motivated by the service a product will offer.

Music, Languages and Physical Education

Music: Thoughtfully select elements for a piece in order to gain a defined effect.

Physical Education: Vary Speed, direction, level and rotation during floor performances

Out of this World Year 6: Assessment Opportunities/Tasks within theme

Core Subjects

English

- Children demonstrate that they are able to ask thoughtful and purposeful questions about the life of an astronaut.
- Children are able to use the key features of a diary to write 2 diary entries of an astronaut's experience.
- Children can coherently debate whether we should travel into space or not.
- Children demonstrate that they are able to ask thoughtful and purposeful questions when interviewing eye witnesses.
- Children will be able to select useful methods of delivering both written and spoken information about the alien landing.

Mathematics

- Children are able to accurately plot and read coordinates of launch sites in all 4 quadrants.
- Children can correctly solve problems when the scale factor is known.
- Children will be able to convert between units of measurements, both metric and imperial when exploring distances between planets.
- Children will be converting times and understanding analogue and digital timings when looking at time zones.

Science

- N/A

Foundation Subjects

History, Geography and Citizenship

History:

- Children are able to place events on a timeline in chronological order when looking at the space race
- Children will be able to identify the changes in space travel over time with a focus on key historical figures and the impact they had on developments through history
- Children will also have to identify reasons why things happened.

Geography:

- Children are able to identify and describe patterns on the location of launch sites
- Children are able to identify both the similarities and differences and differences between planets geography
- Children will compare and contrast the geography of different planets i.e. conditions
- Children will use map skills to identify countries that fall into different time zones.

Citizenship:

- Children can negotiate and reflect upon scientific and religious theories, producing a balanced argument from both sides of the debate into space travel.

Art and Design and Design Technology

Art: children demonstrate interesting effects using a range of media to create representations of the planets.

DT: children accurately create a scaled model of a planet.

DT: children will be able to analyse past designs, identify strengths and weakness of other designs and modify them to draw accurate shuttle designs.

DT: children will be able to work as a member of a team to use a variety of tools/materials to make a rocket model fit for a launch.

Music, Languages and Physical Education

Music: children create a soundtrack of a space launch successfully choosing the elements in order to gain a desired effect.

PE: children successfully create the movement of aliens using a variety of speeds, direction, rotation and levels.