



Pioneers Year 2

Essential Knowledge

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

- That people in the past, with pioneering ideas, inventions and reforms, have had an impact on the world we live in today.
- That people can change the environment that we live in by inventing new machines and processes.
- How to research people's lives using books, the Internet, artefacts and pictures.
- How to present their work in a variety of different ways.

Launch

Design and build time machines in the classroom to act as a role play area throughout the topic.

Explore

Children are to research famous people.

Children are to explore how people survive in hostile environments such as space.

Children to create music based on stars.

Energise

Children share their space work with Class 4.

Celebrate

Visit to Perrygrove Railway.
Link to inventions of George Stephenson.

Core Subjects:

Links to theme

English

Narrative writing
The Man on the Moon
Beegu
Non-chronological reports
Dr Xargles Earthlets
Explanations
Wide variety of non-fiction books about space
Poetry
From a railway carriage

Mathematics

Number
Compare and order dates.

Data Handling
Use data about planets to draw graphs and tables.

Calculating
Use all four operations to calculate price margins/sale prices of their souvenirs.

Science

Materials
Children will think about why different materials are more/less suitable for astronauts clothing.

Healthy eating
Children will consider what food humans need to be healthy.

Pioneers Year 2: Theme Content

Personal Development

Spiritual

Children will consider whether choices made by people in the past were influenced by their spiritual beliefs.

Moral

- Children will ask their own questions about dealing with changing feelings and emotions
- Children will judge the value of information that they find out through research and discuss with others what information is of value.

Social

Children will work collaboratively. They will communicate and negotiate with others through making shared 'Big Books'

Cultural

- Children will learn to think about the impact that people in the past have had on their lives.
- They will consider how lives changed as people moved from the countryside to towns to work in factories.
- How have our own experiences of leisure time been influenced by ease of transportation.

Foundation Subjects

History, Geography and Citizenship

History Skills:

Children will use evidence to answer questions about things that happened in the past. They will use artefacts, pictures, stories, the Internet and databases to investigate the past.

Children will identify some of the different ways in which the past has been represented and understand that their life is different from the lives of people in the past. Children will place events and objects in order on a time line and describe topics, events and people they have studied.

Children will place people and periods they have studied into different periods of time.

Art and Design and Design Technology

Art and design skills

Children will design a simple wheeled vehicle and say where their model needs improvements.

Some children will be able to identify problems and improve their model. They will work with a range of tools, materials, components and processes.

Music, Languages and Physical Education

Skills in Music

Children will use percussion instruments to develop their skills in composition. They will experiment with tempo, rhythm and crescendo to create a piece of music to match a selection of images.

Some children will be able to evaluate and improve their composition.

Computing

Skills in Computing

Children will use the Internet to research famous people.

They will record music into their computers and insert to match images to make a simple photo-story.

They will present their work using a variety of programmes.

Pioneers Year 2: Links to National Curriculum Framework

Core Subjects:

English

- To become familiar with a wide range of texts of different lengths.
- Ask and answer questions about texts.
- Explain and discuss understanding of texts.
- Retrieve and record information from non-fiction, using titles, headings, sub-headings and indexes.
- To organize writing in-line with its purpose.

Mathematics

- Compare, describe and solve practical problems for lengths and heights, mass/weight, capacity, volume and time.

Science

- Investigate and describe the basic needs of animals, including humans for survival (water, food and air).
- Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.
- Identify and compare uses of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard.

Foundation Subjects

History, Geography and Citizenship

History:

- Look at the lives of significant individuals in Britain's past who have contributed to our nation's achievements—scientists such as Isaac Newton or Michael Faraday, reformers such as Elizabeth Fry or William Wilberforce, medical pioneers such as William Harvey or Florence Nightingale or creative geniuses such as Isambard Kingdom Brunel or Christina Rossetti.
- Place events and artefacts in order on a time line.
- Label time lines with words or phrases such as; past, present, older and newer.
- Use dates where appropriate.

Geography:

- Ask and answer geographical questions (such as: what is this place like? What or who will I see in this place? What do people do in this place?).
- Use aerial images and plan perspectives to recognize landmarks and basic physical features.

Art and Design and Design Technology

Art and Design:

- Respond to ideas and starting points.
- Explore ideas and collect visual information.
- Explore different methods and materials as ideas develop.

Design Technology:

- Design purposeful, functional appealing products for themselves and other users based on design criteria.
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.
- Create products using levers, wheels and winding mechanisms.
- Cut materials safely using tools provided.

Music, Languages and Physical Education

Music:

- Create a sequence of long and short sounds.
- Create a mixture of different sounds (long and short, loud and quiet, high and low).
- Choose sounds to create an effect.
- Sequence sounds to create an overall effect.

Computing

- Use a range of applications and devices in order to communicate ideas work and messages.

Pioneers Year 2: Assessment Opportunities/Tasks within theme

Core Subjects

English

- Create a non-fiction 'Big Book' based on facts about Space.
- Create non-fiction fact files based on the pioneers studied within the topic.
- Write questions for an interview with an astronaut.
- Create a persuasive poster about the benefits of travelling by train.

Mathematics

- Use a range of mathematical measuring skills when creating the model of a train.

Science

- Use understanding of the basic needs of humans to explain why the moon would be an unsuitable place for humans to live.
- Evaluate the properties of different materials and choose a material that would be suitable for clothing for an astronaut.

Foundation Subjects

History, Geography and Citizenship

History:

- Sequence ideas and events on a timeline, including reference to key dates.
- Conduct key historical research to find out about the different lives of key individuals from the past, identifying how they have shaped history.

Geography:

- Use a map to identify the key geographical features of the moon and identify why it would not be suitable for human habitation.

Art and Design and Design Technology

Art and Design:

- Design and illustrate a Victorian souvenir based on those observed.

Design Technology:

- Design and make a time capsule.
- Design and make a train, using moving parts, cutting and construction techniques.

Music, Languages and Physical Education

Music:

- Children compose and play a piece of music to accompany video clips of rockets taking off into space, cruising through space, orbiting the moon and landing on the moon, varying the volume, pitch etc. as appropriate.

Computing

- Use a range of applications and devices in order to present the work throughout the topic.