

How can we reach the stars? Year 5 - Spring Term

NUMERACY

- To identify, name and write equivalent fractions, represented visually, including tenths and hundredths.
- To read and write decimal numbers as fractions.
- To recognise mixed numbers and improper fractions and convert from one form to the other.
- To compare and order fractions whose denominators are all multiples of the same number.
- To read, write and order and compare numbers with up to three decimal places.
- To estimate volume and capacity
- To convert between different units of metric measurement.
- To convert between units of imperial and metric measurements.
- To interpret negative numbers in context.
- To use roman numerals up to 1000.
- To solve multi-step problems involving all four mathematical operations.

WOW/ IMMERSION (Half Term 1)

Designing and making bottle rockets in school, including experimenting how to make them launch higher.

Non-Chronological report.

Write a report based on cosmic objects.

Fortnight 1

LITERACY

- To add well-chosen detail to interest the reader.
- To organise writing into paragraphs to show different information or events.
- To plan writing by noting and developing initial ideas, drawing on reading and research where necessary.
- To integrate models from my reading into my writing.
- To link ideas within paragraphs using connecting adverbs and adverbs of time.
- Manage shifts in time and place effectively and guide the reader through texts.

NOVEL STUDY

Cosmic
By Frank Cottrell
Boyce

Newspaper article.

Write a newspaper article describing a fictional disaster which has occurred during a space mission.

Fortnight 2

MAIN DRIVER (Science)

Study of the solar system and Earth's place within it.

Short Stories

Write a short story in which a character time-travels into the past to visit the Anglo-Saxons.

Fortnight 3

HISTORY

We are learning about the settlement of Britain by Anglo-Saxons and Scots in addition to the Vikings and Anglo-Saxons in Britain (to 1066).

SPaG

- To distinguish between homophones and other words which are often confused.
- To use modal verbs or adverbs to indicate degrees of possibility.
- To use adverbials of time.
- To use relative clauses
- To spell a wider range of words from the year 5 spelling list.

SCIENCE

To describe the movement of Earth and other planets relative to the Sun and of the Moon relative to Earth.
To use Earth's rotation to explain day and night.
To plan different types of enquiry to answer questions
To take accurate measurements and repeat them if needed
To use results to make predictions and suggest further tests
To present findings orally and in writing.

CREATIVE

To improve our mastery of art and design techniques, with a range of materials.
To produce creative work, exploring ideas and recording experiences.
Learn about great artists, architects and designers.
Improvise and compose music.
To listen with attention to detail.
To develop products fit for purpose.
To communicate design ideas in various ways
To use a wider range of tools and materials
To evaluate existing products and improve our products.

MAIN OUTCOME (Half Term 1)

500 words 2019 (BBC Radio 2 competition).

PSHE and RE

- To learn about different Views regarding creation,
- Including creation stories
- From two or more different religious traditions in their sacred texts.
- To be able to recognise more than one viewpoint on an issue.
- To understand how to manage their safety.

PE

Swim at least 25 metres; use a range of strokes; perform self-rescue.

COMPUTING

- To use sequence, selection and repetition in programs.
- To use logical reasoning.
- To understand computer networks.

What are we learning?

How can we reach the stars? Year 5 - Spring Term

NUMERACY

In numeracy we will be exploring distances within space and between planets so that we can fully explore place value of increasing large numbers in context, including 6-digit numbers and numbers with multiple decimal place.

We will build our ability, skills and confidence working with fractions, decimals and percentages so that we can calculate and compare fuel ratios and amounts needed to launch a rocket into space.

We will create fraction walls and towers so that we can recognise equivalent fractions in context and to support our calculations.

Comparing surface temperatures of the planets within our solar system will allow us to look at negative numbers in context.

Financial costs will be explored so that we can understand the monetary cost of space travel.

WOW/ IMMERSION
(Half Term 2)
School trip – TBC.

Diary Entry
Write a diary entry from the point of view of an astronaut visiting "Pandora"

Fortnight 5

LITERACY

Following analysis of the novel "Cosmic" we will produce a wide range of both fictitious and informational writing based around our topic's theme.

We will use the talk for writing methodology to produce newspaper reports and short stories. We hope to submit our stories to the BBC 2 short stories competition. We will also create and perform speeches and plays, detailing our learning relating to our "cosmic" topic.

NOVEL STUDY

Cosmic
By Frank Cottrell
Boyce

Play
Write a scene about a space battle for a play.

Fortnight 6

MAIN DRIVER (Science)

Study of the solar system and Earth's place within it.

Speech writing.

Write a speech for a government official reporting on a successful mission returning from space.

Fortnight 7

HISTORY

We will look at historical events regarding space, space travel and find out about famous astronauts. Looking at the failed and successful Apollo missions. Read Astronaut Biographies. Anglo-Saxon Britain (through time travel activities.) Look at where the Anglo-Saxons came from, how they farmed the land and the influence they had on Britain.

SCIENCE

We will look at the physics involved in flight and space travel. Make our own rockets.

Research: space and the planets. Look at the sun, moon and the Earth and the relationship between them (night, day and seasons).

Learn about plants, animals and habitats through 'Pandora' literacy work to explore the possibility of life beyond earth.

CREATIVE

Look at Space Art in the style of Peter Thorpe. Listen to Holst's The Planets and create our own music using Garage Band. Make models of orbiting planets, rockets etc. Making models related to space.

SPaG

Spelling is taught during Thursday and Friday Mornings. Children will be tested weekly on their learned spellings. Grammar is contextualised using the novel 'Cosmic'.

MAIN OUTCOME (Half Term 2)

Class assembly including performances of the plays they have written and information they have learned across the topic. Date TBC.

PSHE and RE

We will discuss the Big Bang theory Vs religion and look at creation stories from around the world. Discuss the 'morality' of using animals in the space race. Look at issues raised in 'Cosmic' about looking after ourselves and responsibilities.

PE

Swimming.

COMPUTING

Create fact files about the planets, astronauts, space travel and the solar system. We will collaborate to make power points displaying information we have gathered /learned. Use Garage Band app to play and create music.

What are we doing?