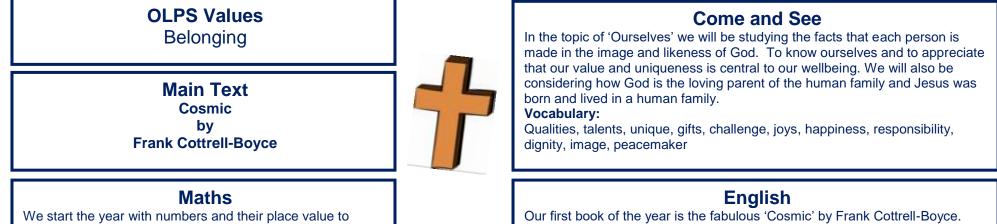
## Year 5 Autumn Term 1 – Mission Control





We start the year with numbers and their place value to 1 000 000 which includes making number patterns and rounding numbers to the nearest 10, 1000, 10 000 and 100 000.

After studying place value, we will be exploring addition and subtraction of numbers to 1 000 000 using a variety of strategies and with both mental and written methods. Once we have completed adding and subtracting, we will begin multiplication and division, We will also look at prime, composite, square and cube numbers.



## Science

As part of our Mission Control topic, we will describe the shape and movements of the Earth, Sun, Moon and other planets, comparing orbits and key features. We will describe why day turns to night and identify and classify all the phases in the cycle of the Moon.

We will also research how our ideas about the solar system have changed over time.

**Vocabulary:** Earth, planets, Sun, solar system, Moon sphere/spherical, rotate/rotation, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, orbit 'dwarf' planet



Our first book of the year is the fabulous 'Cosmic' by Frank Cottrell-Boyce. During our reading of this book, we will be studying the key features of both fiction and non-fiction writing genres, beginning with character descriptions, and diary entries written in role as our knowledge of the main characters deepens. The Space topic will also inform our writing, where we will compose formal speeches, and consider non-fiction devices and features in our information leaflets on the planets of the solar system. We will look at the persuasive language features of advertisements to enable us to convince people to come to the space themed 'Infinity Park' – inspired by 'Cosmic'. and advertisements. Reading will focus on participating in discussions about books that are read to us and those we can read for ourselves, building on our own and others' ideas and challenging views courteously. We will also provide reasoned justifications for our own views.

In grammar punctuation and spelling we will focus on how and when to use brackets, dashes or commas to indicate parenthesis. We will look at sentence structure and learn how to identify main and subordinate clauses, as well as including relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun, in our writing. This term we will also develop our understanding of linking devices across paragraphs to build cohesion including adverbials of time, place and number. Spelling involves words with silent letters, words with prefixes and suffixes and understanding the conventions for adding them, such as: the letter string 'ough' and those ending in 'ible', and 'able'.

## Year 5 Autumn Term 1 – Mission Control



Humanities	STEM
Geography	DT
We will be looking at the mapping of the planet Earth. We will locate places and describe their location in terms of the equator and the tropics of Cancer and Capricorn. We will use a variety of mapping systems including globes, atlases and digital. We will also use large and small scale maps. History This focuses on sequencing the key events in the history of space travel, including how ideas of the solar system have changed over time. We will study key historical figures such as astronomers, scientists and astronauts. Vocabulary: Climate zones Tropic of Cancer Tropic of Capricorn Equator Settlements	Computing In our computing lessons we will focus on computing systems and networks and how we share Information. We will be identifying and exploring how information is shared between digital systems.
Arts	PE
Art Science inspired art work involves the use of charcoal, oil pastels and mixed media of planets including textiles. We will investigate, research, test and adapt ideas using a sketchbook. We will use a variety of techniques to add effects, e.g. shadows, reflection, hatching and cross-hatching. Music Our Music lessons revolve around the Bon Jovi song: Livin' on a Prayer, where we will identify the structure/ instruments/voices of the piece, as well as developing our understanding of Rhythm and Pitch. Melody focuses on using the notes: G, A + B.	Rugby Forest Schools