**PE**

Gymnastics – Pupils will develop skills and agilities to show control and precision in performance.

NC links

* develop flexibility, strength, technique, control and balance

**Computing**

Pupils will work with a specialist teacher to continue to develop their understanding of basic programming.

NC links:

* Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
* Design, write and debug programs that accomplish specific goals

**Science**

Pupils will learn about the Solar System and the universe by gaining an understanding of:

* How the planets in our Solar System are organised.
* The Earth’s movement through space and use this idea to explain night and day.
* The history of astronomy and how ideas about the solar system have developed.

NC links:

* describe the movement of the Earth, and other planets, relative to the Sun in the solar system
* describe the movement of the Moon relative to the Earth
* describe the Sun, Earth and Moon as approximately spherical bodies
* use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky.

Wow day – Visit to the Jodrell Bank Discovery Centre where pupils will see the third largest radio telescope in the world. Activities will include experiments to explore a variety of concepts linked to the solar system.

**RE**

Pupils will learn about Sikhism and question if Sikh stories are important today.

**Geography**

Pupils will consider the past, present and future of their local area. Pupils will study maps and satellite imagery of the UK and local area. This knowledge will be used to create their own maps of the future

NC links:

describe and understand key aspects of:

* physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
* human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water
* Learn geographical skills and fieldwork: use maps and symbols to build their knowledge of the United Kingdom
* Use fieldwork to observe, measure, record and present features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

THEME: Earth and Space

Power of Reading Book:

Cosmic



**Art and Design**

Pupils will study abstract art, focusing on line colour and shape. Pupils will study the works of Picasso, Miro and Pollock with a focus on Kandinsky’s use of music as inspiration. Pupils will use Holst’s “Planets Suite” to create Space themed abstract art.

NC links:

Pupils will

* improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
* learn about great artists, architects and designers in history.

**Design and Technology**

Space food – pupils will continue to develop their understanding of nutrition and healthy eating by exploring what astronauts eat during their stay in space. Pupils will design and develop their own astronaut meal.

NC links:

* Understand and apply principles of healthy and varied diet
* Use research and develop design criteria

**English**

This half term, our ‘Power of Reading’ book is Cosmic by local author Frank Cotrell-Boyce. The book follows a twelve-year-old boy who cons his way onto a spaceship.Written English work will be based around the text and will include a range of writing genres.

**NC links**

**Reading**

* Continuing to read and discuss an increasingly wide range of fiction, poetry and non-fiction books
* Making comparisons within and across books
* Checking the book makes sense to them by discussing their understanding
* recommending books that they have read to their peers, giving reasons for their choices
* Predicting what might happen from details stated and implied
* Participate in discussions about books that are read to them, building on their own and others’ ideas and challenging views

**Writing**

* **Spelling** - use prefixes and suffixes; distinguish between homophones; use dictionaries to check the spelling and meaning of words; use a thesaurus
* **Handwriting and presentation** – write legibly and with increasing speed by deciding whether or not to join specific letters
* **Composition** – plan writing by: identifying the audience and purpose for writing; noting and developing ideas; considering how authors have developed characters and settings. – draft and write by: in narratives, describing settings, characters and atmosphere; using further organisational and presentation devices to structure text and to guide the reader. – evaluate and edit by: assessing the effectiveness of their own and others’ writing; proposing changes; proof read for spelling and punctuation errors.

**Grammar, Vocabulary and punctuation**

Work on different word classes – nouns, adjectives, verbs, adverbs, prepositions, determiners

* Ensure the consistent and correct use of tense throughout a piece of writing
* Ensure correct subject and verb agreement when using singular and plural
* Using commas to clarify meaning or avoid ambiguity
* Punctuating bullet points clearly

**Mathematics**

Pupils will continue to develop their understanding of division and problem solving by applying their knowledge of the four functions. Pupils will build on the work on fraction families to compare and convert fractions.

(A focus of spoken language and justification of thinking through discussion using correct mathematical terminology)

**Multiplication and Division**

Pupils should be taught to:

* divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
* multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
* recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
* solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
* solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
* compare and order fractions whose denominators are all multiples of the same number
* identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
* recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number
* add and subtract fractions with the same denominator and denominators that are multiples of the same number
* multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
* read and write decimal numbers as fractions
* recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
* round decimals with two decimal places to the nearest whole number and to one decimal place
* read, write, order and compare numbers with up to three decimal places
* solve problems involving number up to three decimal places
* recognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimal