





### **Earth and Space Spring One**

In this unit of study, children will first become familiar with their own planet and how it can be divided up into countries, cities, hemispheres etc. We will then move on to look at its location in space and how there is a relationship between space and time. We will examine space food and similar foods that require rehydration for cooking before each child plans and prepares their own healthy meal. In computing, the children will look at programming using Scratch quizzes.

# **Learning Challenge Questions:**

- How can our planet be divided up to help us locate significant places?
- How are time and space related?
- Where, in the grand scheme of things, is Earth and what is close by?
- What do Spacemen eat and what can we make that is similar?

## Core Subjects

### READING

Our class reader this term will be 'Cosmic' by Frank Cottrell-Boyce. As ever, we will use a variety of texts during our Guided Read sessions and follow the VIPERS as our skills base.

- Maintaining positive attitudes to reading
- Listen to and discuss a range of fiction, poetry and non-fiction which they might not choose to read themselves.
- Regularly listen to whole novels read aloud by the teacher from an increasing range of authors.
- Explore themes within and across texts e.g. loss, heroism, friendship.
- Make comparisons within a text e.g. characters' viewpoints of same event
- Read books and texts that are structured in different ways for a range of purposes.
- Express preferences about a wider range of books including modern fiction, traditional stories, myths and legends.
- Learn a wider range of poems by heart.
- Prepare poems and play scripts to read aloud and perform, showing understanding through intonation,

### WRITING

Writing to entertain this term focuses on science-fiction narrative whilst our focus on writing to inform involves the non-chronological report text type.

Genre: Science - Fiction Narrative

Purpose: entertain

Outcome: An out of this world narrative.

- Create and punctuate complex sentences using ed opening clauses e.g. Exhausted from the race, Sam collapsed in a heap.
- Create and punctuate complex sentences using ing opening clauses, e.g. Grinning with anticipation, Paul launched himself from the diving board.
- Create and punctuate sentences using simile starters, e.g.
   Like a fish out of water, she conversed awkwardly with the other quests.
- Demarcate complex sentences with commas.
- Link ideas across paragraphs using adverbials for time, place and numbers e.g. later, nearby, secondly.
- Use expanded noun phrases to convey complicated information concisely.
- Blend action, dialogue and description within and across paragraph
- Suggest changes to grammar, vocabulary and punctuation to enhance effects and clarify meaning.

### COMPUTING

This half term we will be learning to design and create effective Quizzes using Scratch. This project will focus on the skills of computational Thinking and Coding and programming.

### Computational Thinking:

- I can solve problems by decomposing them into smaller parts
- I can use selection in algorithms

#### Coding/programming:

- I can create programs by decomposing them into smaller parts
- I can use a variety of selection commands in programs
- I can work with variables
- I can evaluate my work and identify errors

tone volume and action so the magnine is clear to an	Ensure consistent and correct use of tense throughout a	
<ul> <li>tone, volume and action so the meaning is clear to an audience</li> <li>Explain the meaning of words within the context of the text.</li> <li>Use punctuation to determine intonation and expression when reading aloud to a range of audiences.</li> <li>Infer characters' feelings, thoughts and motives from their actions and justify inferences with evidence.</li> <li>Predict what might happen from information stated and implied.</li> <li>Through close reading of the text, re-read and read ahead to locate clues to support understanding.</li> <li>Scan for key words and text mark to locate key information.</li> <li>Summarise main ideas drawn from more than one paragraph and identify key details which support this.</li> <li>Justify opinions and elaborate by referring to the text, e.g. using the PEE prompt - Point + Evidence + Explanation.</li> <li>Analyse the conventions of different types of writing e.g. use of first person in autobiographies and diaries.</li> <li>Explain the effect on the reader of the authors' choice of language.</li> </ul>	<ul> <li>Ensure consistent and correct use of tense throughout a piece of writing.</li> <li>Ensure consistent subject and verb agreement.</li> <li>Proofread for spelling and punctuation errors.</li> <li>Genre: Non-chronological text Purpose: Inform Outcome: A presentation of learning to parents through a Wikipedia.</li> <li>Create and punctuate complex sentences using ed opening clauses e.g. Exhausted from the race, Sam collapsed in a heap.</li> <li>Create and punctuate complex sentences using ing opening clauses, e.g. Grinning with anticipation, Paul launched himself from the diving board</li> <li>Demarcate complex sentences using commas in order to clarify meaning.</li> <li>Identify and use commas to indicate parenthesis, e.g. The house, lonely and abandoned, teetered on the edge of the cliff.</li> <li>Identify and use brackets</li> <li>To indicate parenthesis, e.g. in formal writing: The Cheetah (Acinonyx jubatus) inhabits open grassland in Africa.</li> <li>Identify parenthesis, e.g. in less formal writing: The cake was lovely-delicious in fact-so I had another slice.</li> </ul>	
Distinguish between statements of fact or opinion within a text.	<ul> <li>Use similar writing models.</li> <li>Identify audience and purpose.</li> <li>Draw on reading and research.</li> <li>Use organisational and presentational devices effectively.</li> <li>Proof reading for spelling, punctuation and grammar.</li> </ul>	
Key Vocabulary:	Key Vocabulary:	Key Vocabulary:
		key vocabulary.
VIPERS: Vocabulary, Infer, Predict, Explain, Retrieve, Summarize.  Scan and skim read, annotate, comprehension, supporting evidence.	Main clause, subordinate clause, complex sentence, relative clause, relative pronoun, proof read, modal verb, brackets, parenthesis, extended noun phrase.	design, animation, program, algorithm, coding, repeat, variable, variable values, app, scratch.
Help me at Home by:	Help me at Home by:	Help me at Home by:
Reading frequently with me and asking me questions to help me understand what I have read: every night if possible and sign my reading journal.	Encourage me to write for pleasure, completing any homework set, working on my handwriting, practicing and testing me on my weekly spellings and subject vocabulary	Learning any relevant vocabulary, commenting on my work on see-saw. 'Tinker' with existing Scratch projects using the

Sometimes read to someone and sometimes independently.

Use the parent help sheet which helps you to use the VIPERS technique that we use in school. Allow me time to take my quiz on accelerated reader after completing a book. Challenging me to use new vocabulary learnt in my speech. Follow up on any subject areas discussed in class that interest me by finding different books and articles about them. Visit the library and take part in any book challenges going on in and out of school.

remix tool, Play games like A.L.E.X. and Cargo-Bot on school iPad, Experiment with Keynote on school iPad .

### MATHS

Multiplication and Division: This half term, children build on their understanding of formal multiplication and move to the formal short multiplication method. Children use their knowledge of exchanging ten ones for one ten in addition and apply this to multiplication, including exchanging multiple groups of tens. They use place value counters to support their understanding.

- To multiply 2-digits by 1-digit
- To multiply 3-digits by 1-digit
- To multiply 4-digits by 1-digit
- To multiply 2-digits (area model)
- To multiply 2-digits by 2-digits
- To multiply 3-digits by 2-digits
- To multiply 4-digits by 2-digits
- To divide 2-digits by 1-digit
- To divide 2-digits by 1-digit
- To divide 3-digits by 1-digit
- Do divide 4-digits by 1-digit Divide with remainders

Fractions: Children look at different representations of fractions to expose any misconceptions. They can then move onto a practical exploration of equivalent fractions by folding paper before comparing fractions with drawings and diagrams in these first recap steps. Year 5 is the first time children explore improper fractions in depth so we have added a recap step from Year 4 where children add fractions to a total greater than one whole.

- What is a fraction?
- Equivalent fractions
- Fractions greater than 1
- Improper fractions to mixed numbers
- Mixed numbers to improper fractions
- Number sequences
- Compare and order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions

## **SCIENCE**

Children will make links with geography and the study of Earth and learn how our planet is in the 'Goldilocks zone' within our solar system. Children will discover how space and time are linked and how the earth's movement dictates the seasons and the moon dictates the tides amongst other things!

- Describe the movement of the Earth, and other planets, relative to the Sun and each other in the solar system.
- Describe the movement of the Moon relative to the Earth.
- Describe Sun/Earth/Moon as approximately spherical bodies.
- Use the idea of the Earth's rotation to explain day and night.
- The Earth spins once around its own axis in 24 hours, giving day and night.
- The Earth orbits the Sun in one year.
- We can see the Moon because the Sun's light reflects off it.
- The Moon orbits the Earth in approximately 28 days and changes to the appearance of the moon are evidence of this.
- Use the Earth's movement in space to explain the apparent movement of the sun across the sky.
- The Sun appears to move across the sky from East to West and this causes shadows to change during the day.
- Changes to shadow length over a day or changes to sunrise and sunset times over a year are evidence supporting the movement of the Earth.

### Pupils might work scientifically by:

- Comparing the time of day at different places on the Earth through internet links and direct communication.
- Creating simple models of the solar system.
- Constructing simple shadow clocks and sundials, calibrated to show midday and the start and end of the school day.
- Finding out why some people think that structures such as Stonehenge might have been used as astronomical clocks.

RE

Mission: The Church, the Christian family, is made up of smaller Christian families called dioceses. Each diocese is led by a bishop. The bishops continue the work of 'the twelve', the apostles, who continued the work and mission of Jesus. Jesus is the head of these families. He is the head of the Church. There are other Christian families which are not part of the Catholic Church. Children learn that 'Ecumenism' is the word used for promoting unity among Christian churches.

- To make links to show how inspirational leaders affect their behaviour and that of others.
- To compare their own and other people's ideas about questions about what inspires people in their mission and realise that some of these are difficult to answer.
- To begin to show and understanding of how their own and others' decisions in carrying out their mission in communities are informed by beliefs and values.
- To make links between how Jesus undertook his mission to share the Good News and how each diocese continues that mission and work today.
- To give reasons why people carry out Jesus' mission in different ways through what they say and do.
- To describe and begin to show they understand how dioceses and different Christian communities continue to carry out the work and mission of Jesus. Some children will be able to make links between this and what they have read in scripture.
- To show they understand why Christians, because of what they believe, want to share the mission of Jesus and do so in different ways.

• Add fractions within 1 • Add 3 or more fractions		<ul> <li>To engage and respond to questions of how religious teaching affects life and work within a community and diocese.</li> <li>Memorial Sacrifice: The Eucharist is a memorial sacrifice in the Jewish sense of remembering, that is it makes present a past reality. It is a memorial of Christ's sacrifice on the Cross, through which Christ gives his body and blood for the salvation of all people and provides hope for the future.</li> <li>To compare their own and others' ideas about what makes a particular memory significant and why words, symbols or actions might evoke it and realise some of these questions are difficult to answer.</li> <li>To make links to show how feelings and beliefs about memories affect their own behaviour and that of others.</li> <li>To make links between the Passover in Exodus, the Last Supper and belief in the Eucharist.</li> <li>To use a developing religious vocabulary to give reasons for religious actions and symbols connected to the Passover and the celebration of the Eucharist.</li> <li>To give reasons for why believers follow the example of Jesus in his life of sacrifice.</li> <li>To describe and show understanding of scripture, symbols, beliefs, ideas, feelings and experiences about the Jewish Passover, the Last Supper and the celebration of Eucharist, making links between them.</li> <li>To show understanding of how belief in the sacrifice of Jesus shapes the lives of Christians.</li> <li>To engage with and respond to questions of life choices in the light of religious teaching about sacrifice.</li> </ul>
Key Vocabulary:	Key Vocabulary:	Key Vocabulary:
exchanging, multiply, product, divide, divisible, formal written method, column	solar system, spherical, axis, rotate, orbit, gravity, tilt, hemisphere	Mission, bishop, ecumenism, cathedral, diocese, inspirational, Baptism, Christian Unity, Gentile, inspired
fraction, equivalent, improper, mixed number, numerator, denominator,		Memories, significant, memorial sacrifice, Passover, Pesach, host chalice, liturgy of the Eucharist, Eucharistic Prayer, consecration adoration, genuflect, acclamation

Help me at Home by:	Help me at Home by:	Help me at Home by:
Continuing on with Times Tables practice on TT Rockstars or similar, completing any relevant homework, testing me on the maths vocabulary, reading around the topics covered.	Reading around the topic, learning the meaning of any important vocabulary from the unit, researching space, learning to tell the time and discussing the seasons, making models of the solar system or planets.	Taking me to Mass so that I can experience quiet prayer, practise the responses and understand the order of the Mass.  Reading around the topics covered and also about Judaism, learning the meaning of any important vocabulary from the unit, visiting a synagogue.
	Foundation Subjects	
GEOGRAPHY With our eye on Earth from Space, we will improve our locational knowledge focusing on the hemispheres, time zones and countries/cities.  Locational Knowledge  Locate majority of world's countries & cities using maps (focus on Europe and N/S America) and identify environmental regions, key physical/human features  Identify position of latitude, longitude and N/S Hemispheres Identify position of Tropics of Cancer/Capricorn, Arctic and Antarctic Identify position of Prime/ Greenwich Meridian and time zones  Examine geographical similarities and differences (regions of UK, European country and N/S America) and communicate geographically.  Skills & Fieldwork  Securely use world maps, atlases and globes and use digital mapping	<ul> <li>Make:</li> <li>According to their functional properties and aesthetic qualities, select from and use a wide range of tools,</li> </ul>	This half term we cover the Invasion Games of football and netball.  Football:  To develop the skill of passing and catching a football.  To develop the skills of striking a ball.  To select appropriate strategies for attack when playing a game.  To apply appropriate strategies for attack  To choose and apply skills and tactics consistently in football.  To choose and apply skills and tactics consistently in football.  Netball:  To develop the skill of passing and catching a netball.  To develop a shoulder pass and shooting a netball type game.  To select appropriate strategies for attack when playing a game.  To select appropriate strategies for attack  To choose and apply skills and tactics consistently in netball.  To choose and apply skills and tactics consistently in netball.
Key Vocabulary:  Prime Meridian axis rotation Greenwich terrestrial Meridian line time zone GMT regions tropics Cancer Capricorn magnetic north cardinal orientation bearing 8-point compass magnetic hemisphere		Key Vocabulary:  Pass, move, strike, tactics, marking, attack, defend, position, shoulder pass, zone, pivot, block, landing foot.
Help me at Home by:  Exposing me to different maps and geographic books, apps,	Help me at Home by:  Talking about ingredients, looking at how food is grouped and the	Help me at Home by:  Practice/play at home with me, sign me up to a local team,

the topic, taking me to a museum related to the topic, helping me with homework.	me help you prepare the meals, talking to me about kitchen/cooking equipment, discussing favourite cuisines and tastes.	
Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.  • play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression  • improvise and compose music for a range of purposes using the inter-related dimensions of music  • listen with attention to detail and recall sounds with increasing aural memory  • use and understand staff and other musical notations  • appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians  • develop an understanding of the history of music	During our Spring 1 topic of Living in the wider world / Careers; aspirations; role models; the future we look at where their lives might take them, the options open to them and the notion that it is possible to become whatever they like if they work for it.  Economic wellbeing: Aspirations, work and career  • that there is a broad range of different jobs/careers that people can have; that people often have more than one career/type of job during their life  • about stereotypes in the workplace and that a person's career aspirations should not be limited by them  • about what might influence people's decisions about a job or career (e.g. personal interests and values, family connections to certain trades or businesses,  • strengths and qualities, ways in which stereotypical assumptions can deter people from aspiring to certain jobs  • that some jobs are paid more than others and money is one factor which may influence a person's job or career choice; that people may choose to do voluntary work which is unpaid  • about some of the skills that will help them in their future careers e.g. teamwork, communication and negotiation  • to identify the kind of job that they might like to do when they are older  • to recognise a variety of routes into careers (e.g. college, apprenticeship, university)	MFL During Spring 1, n MFL, children will study French. This half term, children will learn core vocabulary and phonetics and will cover the topic 'presenting myself', in which children will be able to tell someone some key details about themselves, such as where they live, their name and age and how they are.  Listen more attentively and for longer.  Understand more of what we hear even when some of the language may be unfamiliar by using the decoding skills we have developed.  Communicate on a wider range of topics and themes.  Remember and recall a range of vocabulary with increased knowledge, confidence and spontaneity.  Understand longer passages in the foreign language and start to decode meaning of unknown words using cognates and context.  Increase our knowledge of phonemes and letter strings using knowledge learnt from 'Phonics Lessons 1 to 3'.  Write a paragraph using familiar language incorporating connectives/conjunctions, a negative response and adjectival agreement where required.  Learn to manipulate the language and be able to substitute words for suitable alternatives  Revision of gender and nouns and learn to use and recognise the terminology of articles (EG: definite, indefinite and partitive). Understand better the rules of adjectival agreement and possessive adjectives.
Key Vocabulary:	Key Vocabulary:	Key Vocabulary:
Ballad, verse, chorus, interlude, tag ending, strings, piano, guitar, bass, drums, melody, compose, improvise, cover, pulse, rhythm, pitch, tempo, dynamics, timbre, texture, structure.	employment, aspiration, stereotypes, college, university, apprentice, career, trades.	Relevant vocabulary built up and revised throughout the topic.
Help me at Home by:	Help me at Home by:	Help me at Home by:
Listening to music, discussing the instruments you can hear, sign me up to lessons for playing an instrument.	Talking to me about any of the issues raised in my lessons, learning the meaning of any important vocabulary from the unit.	Practicing new words and vocabulary, accessing any home learning, using basic French around the house.

Visitors, Visits and Outdoor Learning within the theme:	
Visiting chef and other career paths, Planetarium visit, Science outdoors.	