

## Year 5 Curriculum Term 2

Topic Title: Stargazers

### **English**

Year 5 will be reading 'The Jamie Drake Equation' by Christopher Edge. We will be focussing on the following in our writing:

Description – We will be focusing on describing characters and settings linked to our text or our Thematic lessons about space. We will carefully choose language to create effective descriptions, including expanded noun phrases and verbs to show action. We will also develop how our descriptions create mood, tone and atmosphere.

Viewpoints in recounts – We will be writing diary extracts and letters to express the viewpoints from various characters in our book, including Jamie and his dad, reflecting on their separation in the book. We will be using emotive language to show characterisation when writing in role.

Explanation –By researching about how astronauts perform simple daily tasks, we will be planning, drafting, writing and publishing our own 'How to...' books. We will be learning about how to use cause and effect conjunctions, writing in a logical order and also develop our language by using technical vocabulary with confidence.

Narrative – Finally, we will be weaving description, speech and action to plan, write and edit our own extended narratives based on 'The Jamie Drake Equation'. We will consider how our stories need to hook and entertain the reader. We will also use speech and description to develop our characters.

### **Maths**

#### *Statistics*

To solve comparison problems using information in a line graph

To solve sum problems using information in a line graph

To solve difference problems using information in a line graph

#### *Fractions, decimals and percentages*

To identify equivalent fractions (including tenths and hundredths)

To compare and order fractions (whose denominators are multiples of the same number)

To calculate fractions of numbers and quantities

#### *Geometry-properties of shape*

To identify 2D shapes (recap)

To identify 3-D shapes from 2-D representations (including cubes and other cuboids)

To distinguish between regular and irregular polygons based on reasoning about equal sides and angles

#### *Measurement*

To measure and calculate the perimeter of composite rectilinear shapes

To solve missing measure questions when presented algebraically

To calculate and compare the area of rectangles. ( $\text{cm}^2$  and  $\text{m}^2$ )

To estimate the area of irregular shape

#### *Measurement - length*

To convert between different units of metric measure (length)

To use approximate equivalences between metric and imperial units (length)

To use all four operations to solve problems involving measure (length)

#### *Measurement-volume and capacity*

To estimate and measure capacity

To estimate volume

To convert between different units of metric measure (volume/capacity)

	<p>To use approximate equivalences between metric and imperial units (volume/capacity)</p> <p>To use all four operations to solve problems involving measure (volume/capacity)</p> <p><i>Measurement - mass</i></p> <p>To convert between different units of metric measure (mass)</p> <p>To use approximate equivalences between metric and imperial units (mass)</p> <p>To use all four operations to solve problems involving measure (mass)</p>
<p><b>R.E.</b></p> <p>Our focus question this term is: Why is Muhammed Important to Muslims?</p> <p>During this term, we will learn about:</p> <ul style="list-style-type: none"> <li>• Who is Muhammed and why is he important?</li> <li>• The life of Muhammed and his impact.</li> <li>• The importance of the Qur'an.</li> <li>• The influence of role models.</li> </ul>	<p><b>PSHE</b></p> <p>In a world where you can be anything, be kind!</p> <p>Healthy Relationships learning will focus on Kindness and Anti-bullying – ‘Power for good’. Linked to our kindness value, we will be exploring World Kindness Day in November. The focus will be on being kind to yourself/respecting yourself and exploring ways in which we can look after ourselves mentally and physically. We will then focus on anti-bullying. This year’s theme is Power for good, a theme that empowers children to do something positive to counter the harm and hurt that bullying causes. We will also learn about how we are safeguarded at school and our own role in that. We will discuss the difference between falling out with friend, joking and bullying, whilst discussing the role that peer pressure can have on our behaviour. We will link this learning to our online behaviour. To conclude, we will be learning about how our words can have power and how this can be for good or harm.</p>
<p><b>Art</b></p> <p>This term, we will focus on painting and we will be exploring how mood is created. We will do this by learning how to mix tertiary colours. We will also learn how to use different colours to affect mood/feelings. By comparing two paintings, we will discuss how different moods are created. We will experiment with styles used by other artists and explore which cultures/periods of history they come from. Additionally, we will learn to explain some of the features of art from historical periods, such as the Expressionism movement.</p>	<p><b>Music:</b></p> <p><b>Introducing key concepts</b></p> <p>Children are encouraged to think about the performative and imaginary nature of the instrument - so we start by playing 'air guitar', which leads us to thinking about best posture and different ways to hold the instrument. Following this, the children learn to identify and replicate basic rhythmic patterns by hand clap and then by strumming on the guitar. This uses fractions such as <math>\frac{1}{8}</math>, <math>\frac{1}{4}</math> &amp; <math>\frac{1}{2}</math> to subdivide a musical bar. Finally, using a basic guitar TAB system, children try and replicate popular melodies on a single string, over time incorporating more strings This then develops into a simple understanding of triads that can be used as a supporting capacity to the melodies.</p>
<p><b>French: Mon École</b></p> <p>In this unit, we will be learning how to translate items of stationary, different subjects, places in school and how to express opinions about lessons. We will</p>	<p><b>P.E.</b></p> <p>Year 5 will be swimming in term 2. The children will be aiming to swim a range of different strokes, up to a distance of at least 25 metres. As a result of this,</p>

design timetables for our school week using what we have learned, as well as learning about the similarities and differences between a school week in France and a school week for us in Ramsgate.	the children will gain confidence and understand the importance of water safety.
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**Thematic Curriculum**

Topic Title	Stargazers	
Golden Threads	Understanding the World	
Big Question	Do we really need to know what else exists in our Universe?	
Prior Knowledge	During year 5, in Understanding the world, the children learnt about Electricity, Sound and the water cycle. The children developed their scientific disciplinary knowledge, which they will continue to apply during practical investigations throughout year 5.	
Blurb overview	In this unit, we will be learning about the Sun, Earth, Moon and the 8 planets. We will learn the movements and rotations of the solar system. We will learn about the movements of the 8 planets relative to the Sun and the movement of the Moon relative to Earth. We will learn that in the past there have been many debates of the shape of the Sun, Earth and Moon and what we have used to understand the real shape.	
Celebration of Learning	Space Exhibition where we will share our learning with Year 4.	
Text Links	The Jamie Drake Equation – Christopher Edge George’s Secret Key to the Universe – Lucy and Stephen Hawking Curiosity – The Story of a Mars Rover	
Oracy End Point:	Activity Big question debate at end of term	Learning intentions -Consciously adapt tone, pace and volume of voice within a single context. -Plan and deliver a structured argument with introduction, points and a conclusion. -Use facts and examples to support points -Recognise and challenge counter arguments

**Science**

Substantive Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> <li>•To know the movement of the Earth, and other planets, relative to the Sun in the solar system.</li> <li>•To know and be able to describe the movement of the Moon relative to the Earth.</li> <li>•To know that the Sun, Earth and Moon are approximately spherical bodies.</li> <li>•To know how to use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul> <p>-To know about the work of past and present scientists: Past - Galileo and Aristotle Present – Frank Drake</p>	<ul style="list-style-type: none"> <li>-To explore ideas and raise scientific questions</li> <li>-To recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact</li> <li>- To make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them</li> <li>- To choose the most appropriate equipment to make measurements and explain how to use it accurately</li> <li>- To report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations</li> </ul>

- To use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas
- To identify scientific evidence that has been used to support or refute ideas or arguments
- To talk about how scientific ideas have developed over time
- Deliberately varies tone of voice in order to convey meaning e.g. speaking authoritatively during an expert talk
- Gestures become increasingly natural
- Consider the words and phrases used to express their ideas and how this supports the purpose of talk
- To be able to give supporting evidence e.g. citing a text, a previous example or a historical event

**History**

Substantive Knowledge

Disciplinary Knowledge

- To know how to choose reliable sources of evidence to answer questions
- To know that they need to question the reliability of sources
- To know that people can represent events and ideas in ways that persuade others
- To know how to give clear reasons why there may be different accounts of history
- To know how to evaluate evidence to choose the most reliable forms
- To know that there is often not a single answer to historical questions

**Cultural Capital**

Cultural Knowledge: To know the place and movements of the sun, Earth, it's moon and other planets within the solar system.  
 Cultural experiences: Visiting the local Church at Christmas.

**Weekly Overview**

Week 1

**Lesson 1:** Science: big question. Gathering questions. Knowledge organisers.  
 We will look at our knowledge organiser to see what we will be learning this term. We will discuss what we already know about space and write down some big questions that we would like answered over the term.

**Lesson 2:** Science: How does our position in the solar system impact on life on Earth? We will learn about where we sit in space by learning about planets, solar systems and galaxies. We will also be learning the definition of these words. In learning about solar systems, we will find out how our orbit of the sun gives us seasonal changes.  
 -To know how the Earth moves around the sun focusing on its orbit and the impact of this on our seasons

Lesson 3: Science: Who was Galileo/Aristotle and what did they believe? We will learn about how people used to believe the Earth was flat and how these scientists changed this way of thinking. We will then show what we learned about them in a piece of writing.

	<p>-To know the shape of the earth but what people once believed by learning about Galileo/Aristotle.</p> <p>Lesson 4: French: We will be learning about the countries whose first language is French and then trying to accurately draw the outline of France.</p>
Week 2	<p>Lesson 1: Science: Does anything else orbit the sun? In this lesson, we will be learning the order of the planets in our solar system, including why Pluto is no longer considered a planet. We will also learn about conditions on those planets. We will then learn about some music that was inspired by our planets. We will then be creating a simple diagram to display the order of planets in the solar system.</p> <p>To know movement of the Earth relative to the Sun in the solar system by learning the order of the planets and how they move in the solar system.</p> <p>Lesson 2: Science: Does anything else orbit the sun? In this lesson, Team Indigo will be learning about the rocky planets and then Team Royal will be learning about the gas planets. In small groups, the children will research their planets and then create a model to show what they have found out.</p> <p>To know movement of the Earth relative to the Sun in the solar system by learning the order of the planets and how they move in the solar system.</p> <p>Lesson 3: Science: In this lesson, we will be pairing up groups of pupils so that we can present our findings and models from yesterday to the other class. As we are listening to a presentation, we will be looking to answer questions about the rocky/gas planets. We will develop our oracy skills to ensure our presentations are clear and informative.</p> <p>Lesson 4: Art: This week, we will look at our knowledge organiser and begin to learn about tertiary colours. We will be mixing paints to make these tertiary colours.</p> <p>Lesson 5: Computing: We will revisit the dancing sprite project to refamiliarise ourselves with sprites having different 'costumes'. We will then learn to paint on scratch so that we can design our own sprites.</p>
Week 3 PSHE	<p>PSHE Week – Healthy Relationships: Kindness and Anti-Bullying</p> <p>Lesson 1: What role does peer pressure play in bullying? What's the difference between joking and bullying? In this lesson, we will discuss how we can tell the difference between joking and bullying, looking at examples like 'roasting' your friends and that, if both people are not laughing, it isn't a joke. We will create presentations to deliver to the class wherein we will perform both scenarios to highlight the differences.</p> <p>Lesson 2: How can we make sure our online actions are positive? In this lesson, we will discuss what types of online spaces we use and how we interact on them. We will look at ways the internet can be used beyond googling and gaming and design something that would be a positive addition to the web.</p> <p>Lesson 3: How can our words have power for good, or for harm? How can one person start change in a group or school? In this lesson, we will discuss ways we think our school can be improved and then work together to brainstorm how we, Year 5, could help have an impact. We will work together to find a way to begin to make this change and create something to get the wheels turning.</p> <p>Lesson 4: French: We will be choosing a French town or city to research and write down, in French, what we learn about it.</p> <p>Lesson 5 Art: We will learn how to create shade and tint and to know the difference in the meaning of these words.</p>
Week 4	<p>Lesson 1 and 2: Science: How do we get day and night? In the first lesson, we will be learning about the Earth's rotation on its axis. We will be plunging ourselves into darkness and seeing how the light from a torch lights up only one side of a tennis ball, which will represent the Sun and the Earth. In the second lesson, we will then create interactive diagrams to show how this applies to the Earth and what we have learnt about day and night.</p> <p>-To know the Earth's rotation explains day and night.</p> <p>-To know how the Earth moves around the sun focusing on spin, the Earth's axis and the effect of this.</p>

	<p>Lesson 3: Science: How can shadows show us the Earth is rotating? In this lesson, we will be conducting an experiment to observe how shadows change throughout the day. We will then address the misconception that shadows change because the Sun is moving through the sky, using the results of our experiment and our knowledge of the Earth's rotation to explain what's happening.</p> <p>-To know the Earth's rotation explains day and night.</p> <p>Lesson 4: Art: In this lesson, we will be exploring how other artists use colour to create mood. We ourselves will then experiment with using different colours for different moods.</p> <p>Lesson 5: Computing – This week we will create a bat and ball game on Scratch, wherein we will have to program two objects to interact with each other.</p>
Week 5	<p>Lesson 1, 2 and 3: Science: What is gravity? This week we will be answering the question 'What is gravity?' We will be learning about how every object has a gravitational pull and how this is related to object orbiting in space. We will then be conducting an experiment across the week where we ask 'Do heavier things fall quicker?' We will make predictions before designing an experiment to test this and then use our 'thinking like a scientist' to answer the question.</p> <p>-To know that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Lesson 4: Art: This week, we will focus on Edward Munch and Pablo Picasso and their work within the Expressionism movement. We will explore how they used colour to create mood in their paintings. We will experiment with creating our own artwork inspired by their art.</p> <p>Lesson 5: French: We will be learning about the town 'Conflans Sainte Honorine', which is twinned with Ramsgate.</p>
Week 6	<p>Lesson 1: Science: What do we know about the moon? We will be applying our new knowledge about gravity to learn how the moon orbits the Earth and isn't pulled towards the sun. We will also learn about how the moon affects the tides and why it is that we only ever see one side of the moon.</p> <p>-To know and be able to describe the movement of the Moon relative to the Earth</p> <p>Lesson 2: Science: What do we know about the moon? We will be learning about how we know what we know about the moon and discover how the moon landings took place and why they were important.</p> <p>-To know about the moon landings</p> <p>Lesson 3: Scientist: What else is out there? Linking to our English book 'The Jamie Drake Equation' we will be learning about Frank Drake's equation which prompts the discussion of whether there is more life out there among the stars. We will look at the different arguments for and against it and then decide what we think and form an argument to back up our opinion.</p> <p>-To know about the scientific work of Drake and use this knowledge to discuss our own opinions</p> <p>Lesson 4: Art: We will be exploring how different cultures use colours in different ways and how this inspires artwork from different cultures around the world. We will learn to 'read' artwork from around the world by learning what colours mean to other cultures.</p> <p>Lesson 5: Computing: This week we will attempt to make a 'virtual pet'. We will need to paint a home for the pet and then program the pet to interact with different foods.</p>
Week 7	<p>Lesson 1: What else do we want to know? After learning so much about space, we will get the chance this lesson to find out about things that peaked our interest over the term. In previous years this has led to learning about black holes, supernovas, satellites and many other topics.</p>

	<p>-to be able to generate own questions and decide how to find answer</p> <p>Lesson 2: Oracy: Debate Big question at end of term In this lesson we will return to our big question and turn our classrooms into the International Astronautical Conference to have a large debate.</p> <p>Lesson 3: Big Fat QUIZ We will end our topic by having a ‘Big Fat Quiz of the Term’ all about our learning and then really put our knowledge to the test with our termly Thematic quiz.</p> <p>Lesson 4: French: We will be learning about the verb aller (to go) and how to use it.</p> <p>Lesson 5: Art: Final piece. In this final piece, we will be creating a painting using our knowledge of how colours create mood. We will be inspired by the work of Picasso and Munch and the movement Expressionism.</p>
<p>Week 8 RE</p>	<p>Lesson 1: Top up teaching</p> <p>Lesson 2: Who is Muhammad and why is he important? We will study Muhammad and his importance to the people of Islam and discuss figures of similar importance to us.</p> <p>Lesson 3: The life of Muhammad and his impact. We will continue our study of Muhammad and look at the impact that his life and teachings had on the people of Islam.</p> <p>Lesson 4: The importance of the Qur’an. We will study the Islam holy book, the Qur’an, compare it to other holy books that we have studied, think about its importance to Muslims and read some of the stories/teachings.</p> <p>Lesson 5: Art: Final piece evaluation and gallery.</p>