Curriculum Overview: Year 5

	Autumn Term		Spring Term		Summer Term	
	Autumn 1:	**Autumn 2:**	**Spring 1:**	**Spring 2:**	**Summer 1:**	**Summer 2:**
Topic	**Blast Off!** Space topic exploring our solar system! Children will learn about the science behind our Solar System and the Sun, Earth and Moon. They will be able to use art and DT to demonstrate this knowledge, before creating handbooks to help inform future astronauts!	**There's a Boy in the Girls' Bathroom** (Literacy/PSHE focus). Children are to explore friendships and other issues that occur in friendships through this exciting text.	**Mayan Civilisation** Children travel back in time as Indiana Jones type explorers to Mexico and Central America to learn about Mayan Civilisations. They will learn about the history, geography and culture of the people – and even create their own pyramids!	**Doctor, Doctor** History of Medicine. Starting in Ancient Greece, and moving forwards to Medieval, Victorian and modern times. Children will learn about changing attitudes towards disease and health.	**Bonjour!** In preparation for their residential trip, children will learn all about France! This will include learning all about its geography and history, alongside famous artists and writers.	**Desert Survival** Geographical skills, exploring climate and deserts. Children will learn to locate different deserts on the Earth and describe them using correct terminology. They will then think about life in deserts and how humans and animals have had to adapt in order to survive there.
Independent Learning Project	What would an astronaut need in Space? You can design, create, research or write about something that would be useful for an astronaut to have on their Space mission!	What makes somebody a good friend? What personal qualities should they have? Create a model, a piece of art work, design, describe or write about what would make a perfect friend for you.	What would a Mayan explorer bring to the future to teach others about the Mayans? Outcome could be an image, a building or artefact, or a presentation!	Design, write about, research or create your own medical tool! Think about how and why it could be used.	What could you make or show to represent France? It could be a monument or landmark, a piece of writing, or even your own French scrapbook.	What would a perfectly adapted desert animal be? Use art, ICT, write about and show what your animal would be and why it is so well adapted to survive in desert conditions!
Visits/ Trips/ Workshops	• Planetarium, Royal Observatory Greenwich		• British Museum (world in AD 900 workshop) / Chocolate Museum (Brixton) • Old Operating Theatre		• Wallace Collection (Bonjour Madame…) • France Trip • Kew Gardens	
Writing	<u>Fiction</u>: Children will be writing a sci-fi narrative story set on an alien planet,	<u>Fiction:</u> • Diary entry in role based on exploring a	<u>Fiction:</u> • Adventure Text writing.	<u>Non-Fiction:</u> • *Plague Doctors' Handbook* (Non-Chronological report).	<u>Non-Fiction:</u> Children to learn about French geography and culture and how it compares	<u>Fiction:</u> • Children write their own narrative about being in the desert based on texts such

	including meeting an alien character! They will use a wide range of descriptive writing techniques involving powerful language, alongside embedded clauses and adverbial openers. Non-Fiction: *Future Astronaut's Guide to the Solar System*. Children will combine their scientific knowledge of the solar system with non-chronological report writing features to create a guide to help other young people who are interested in Space.	character's thoughts and feelings in a text. • Writing letters in role as key characters and exploring their feelings and emotions. • Writing "school reports" based on knowledge of different characters and evidence from a text.	Explore features of adventure texts before creating chapters for a class 'turn to page…' decision making story book. • Writing alternative endings for a Mayan myth. Non-Fiction: Time Travellers Guide to Mayan Civilisation. Children to write a museum guide book before presenting all of their learning in a "Year 5 Mayan Exhibit".	Children will learn and write about the medieval beliefs about causes, symptoms and cures of the Black Death. They will then write in role as a plague doctor to demonstrate their knowledge. • Newspaper Article about John Snow's cholera findings. Non-fiction: • Persuasive speech writing in role as Doctor John Snow, to persuade people to believe him about the causes of cholera in Victorian London.	to living in London, before writing a French guidebook and then finally presenting their own version of "location, location, location" showing the pros and cons of moving to live in France. Fiction: • Writing postcards home from Paris imagining they are at the top of the Eiffel Tower. Children develop their descriptive writing and prepositional language skills, imagining they are looking out over the city. • A day in the life of a French school child.	as *Desert Trip, Walkabout* and *Holes.* Build up a rich setting description based on their knowledge and use powerful description to explore thoughts and feelings about being lost in the desert. • Scriptwriting – Children will create their own script based on the *Arabian Nights* stories, ready to then create and perform their own *Arabian Nights* puppet show. Non-Fiction: Newspaper report about either real life desert explorer or fictional survival in desert based on text read. Poetry: "I am the desert" personification poems. .
Suggested Texts	• Cosmic by Frank Cottrell Boyce • Unbelievable! by Paul Jennings • Professor Astro Cat's Frontiers of Space Book by Dominic Walliman • Space non-fiction texts	• There's a Boy in the Girls' Bathroom by Louis Sachar • The Boy Who Lost his Face by Louis Sachar • Thief! By Malorie Blackman • Bad Girls by	• TimeRiders: The Mayan Prophecy by Alex Scarrow • Middleworld by J&P Voelkel • Mystery of the Maya (Choose Your Own Adventure) by R. A.	• Children of Winter by Berlie Doherty • Horrible Science: From measly medicine to savage surgery by Nick Arnold • Medical Milestones and Crazy Cures: Book 2 (Operation Ouch) by Dr Chris van Tulleken • Street Child by Berlie Doherty	• France by Teresa Fisher • Pop Up Paris – Lonely Planet Kids • France (Horrible Histories Special) • Paris in the Spring with Picasso • The Glorious Flight – Alice Provensen	• Wolves in the Walls by Neil Gaiman • Holes – Louis Sachar • True Stories of Desert adventures – Gill Harvey • Creatures of the Desert World – Barbara Gibson • Survival at 120 Above – Debbie Miller • Can You Survive the Desert? – Matt Doeden • Desert Trip – Barbara Steiner

		Jacqueline Wilson • The Boy in the Dress by David Walliams	Montgomery • Rain Player by David Wisniewski • Hero Twins by Dan Jolley • Various non-fiction texts		• A Tale of Two Cities (Usborne Classics) • Madame Pamplemousse - Rupert Kingfisher • Find Out about France – Duncan Crosbie	• One Day in the Desert – Jean George • Walkabout – James Vance Marshall
Maths	**Number – Place Value** Read, write, order and compare numbers to at least 1000000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any given number up to 1000000. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero. Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000 Solve number problems and practical problems that involve all of the above. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. **Number- Addition and Subtraction** Add and subtract numbers mentally with increasingly large numbers. Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. **Statistics** Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables including timetables. **Number – multiplication and division** Multiply and divide numbers mentally drawing upon known facts.		**Number – Multiplication and Division** Multiply and divide numbers mentally drawing upon known facts. Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers. 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. Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign. **Number: Fractions** Compare and order fractions whose denominators are 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 [for example $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] 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 [for example $0.71 = \frac{71}{100}$] Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. **Number: Decimals and Percentages** Read, write, order and compare numbers with up to three decimal places.		**Number: Decimals** Solve problems involving number up to three decimal places. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. **Geometry- Properties of Shapes and Angles** Identify 3D shapes, including cubes and other cuboids, from 2D representations. Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees (^{o}) Identify: angles at a point and one whole turn (total 360^{o}), angles at a point on a straight line and ½ a turn (total 180^{o}) other multiples of 90^{o} **Geometry- position and direction** Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. **Measurement- converting units** Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml] Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Solve problems involving converting between units of time. **Measures Volume** Estimate volume [for example using $1cm^3$ blocks to build cuboids (including cubes)] and capacity [for example, using water] Use all four operations to solve problems involving measure	

	Multiply and divide whole numbers by 10, 100 and 1000. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Recognise and use square numbers and cube numbers and the notation for squared ($_2$) and cubed ($_3$) Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19 **Perimeter and Area** Measure and calculate the perimeter of composite rectilinear shapes in cm and m. Calculate and compare the area of rectangles (including squares), and including using standard units, cm_2, m_2 estimate the area of irregular shapes.		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. 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. Solve problems which require knowing percentage and decimal equivalents of $_{12}$, $_{14}$, $_{15}$, $_{25}$, $_{45}$ and those fractions with a denominator of a multiple of 10 or 25.			
Science	**Earth and space** Children learn to: 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.	**Forces** Children learn to: explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effects of air resistance, water resistance and friction that act between moving surfaces. Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.	**Properties and changes of materials** Children learn to: compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Use	**Properties and changes of materials continued** Children learn to: give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. Possible topic link: <u>Creating imaginary medicines</u> reversible and irreversible changes.	**Working Scientifically investigations** Children learn to: plan different types of scientific enquiries to answer questions, including recognising and controlling variables. Where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision and presenting these results in an appropriate form. Using test results to make predictions to set up further comparative and fair tests. Reporting and presenting findings	**Living things and their habitats** Children learn to: describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals

			knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. <u>Possible topic link:</u> building Mayan pyramids and choosing appropriate materials.		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. Identifying scientific evidence that has been used to support or refute ideas or arguments.	
Learning Across the Curriculum (Foundation Subject Links)	**DT:** Creating vinegar and bicarbonate of soda rockets to Blast Off at the start of the term! Use of DT joining skills to create 3D model solar systems – joining materials and choices of materials. **Art:** Exploring modern artists such as Jackson Pollock or Robert Rauschenberg and techniques used to create Cosmic Artwork. **ICT:** Research skills to find out about the Sun, Earth and Moon and other planets in our Solar System. **Computing:** Working with TurnItOn to	**PSHE/Citizenship:** Links to the story of *There's a Boy in the Girls' Bathroom* to discuss friendships and bullying. They will empathise with characters and different situations, using drama to help explore this.	**History** – Children will be exploring the timeline of the outbreak of the First World War, key events of the First World War and the impact of people living in Britain. **Geography** – Labelling and locating the different alliances involved in WWI on a map of Europe.	**History** – exploring changing attitudes to medicine and key discoveries over time, starting with the Ancient Greeks before focussing on the Black Death and the outbreak of Cholera in Victorian London. **Geography** – Children will map the spread of the Black Death across the world into Europe; they will then look at the work of Dr Snow in treating cholera in London, and will create their own maps of Broad Street using grid references and coordinates linking the epidemic victims to water pump locations. **Art & DT** – children creating papier maché Plague Masks.	**Art** – focus on portraiture and the techniques of famous portrait artists, such as Freida Kahlo, Vincent Van Gough and Pablo Picasso. Children will create their own self-portraits inspired by these artists. **ICT:** Researching the lives on influential artists and their styles.	**Art & DT** – Creating puppets from textiles and use of different materials to create a puppet show and stage based on *Arabian Nights* stories. <u>Phoenix only</u> - specialist art unit with Miss Sides, linked to the desert topic. **Geography** – Children will need to locate deserts and describe their location using geographical language linked to continents, maps and climate zones. They will use an 8 point compass to help describe different locations. They will then create their own World maps showing the locations and names of deserts. Human geography - http://www.bbc.co.uk/programmes/p01ckklh Lives of people who live in deserts, comparison to our lives.

	create Scratch computer games.					
Music	**Notate the pitch 3** ***LSO Style Project based on The Planets Suite*** *Explore how motifs and melodies are used to represent themes within music. Developing familiarity with a famous piece of orchestral music.* Pitch, duration, texture, structure, tempo, timbre, dynamics **2a, 2b, 2c, 2d, 2e**	N/A	**Bang the Drum!** *Experience the tradition of African Drumming. Develop playing of complex polyrhythms. Use graphic notation.* Duration, texture, structure **2a, 2c, 2d, 2e, 2f**	N/A	**RAP time** *Take a journey through Hip-hop music, and gain a stylistic awareness of different genres. Compose rap lyrics and perform with accompanying rhythms.* **2a, 2b, 2c, 2d, 2e, 2f**	N/A
RE **How do beliefs influence actions?**	Beliefs about God	Christmas around the world	Animals lawcase or Thankfulness	What inner forces affect us	Muhammad and the Qur'an	Jesus' example
PE	Dodgeball (Moving Matters Scheme)	Gymnastics (Moving Matters Scheme)	Dance (Moving Matters Scheme)	Net and wall games (Moving Matters Scheme)	Athletics (Moving Matters Scheme)	Striking and Fielding (Moving Matters Scheme)
French	French: Greetings, Numbers, Introducing ourselves and Classroom instructions	French: Colours, Days of the week and Months of the year	French: Weather, Describing simple objects and expressing likes and dislikes	French: Following and giving simple instructions, expressing thanks/opinions and describing people	French: Animals, Clothes and Parts of the Body	French: Family, Food and drink and Leisure and Holidays