

Termly Curriculum Information

Term 1 2017: 21st August – 15th December

Year 5

Topic: Mission to Mars and Go Global

Science: Space/Forces

English	
Key Learning Skills and Knowledge	Key Activities
<p>Speaking and Listening</p> <ul style="list-style-type: none"> • Retell narratives with a focus on Science Fiction and report writing through Talk for Writing. • Speak audibly and fluently to an audience through presentations. • Use appropriate registers for effective communication. • Give well-structured reports and narratives for different purposes. • Use relevant Talk for Writing strategies to build their vocabulary and language usage. • Listen and respond appropriately to adults and peers. • Use spoken language to develop understanding through discussing, planning, creating, roleplaying and exploring ideas. • Identify points of interest when listening to fiction and non-fiction texts and discuss why giving evidence • Comment in more detail on the performance of others giving positive feedback when asked • Consistently listen carefully and respond appropriately with relevant question. • Orally perform fiction and non-fiction texts through Talk/Drama for Writing 	<ul style="list-style-type: none"> • Participate in presentations, performances & role-plays • Learn and create actions for a text • Presenting ideas to the class and wider year group • Telling stories to younger year groups that they have created • Listen to and discuss a wide range of science fiction texts looking at genre and features • Write and read aloud a Science Fiction story of their own imagination • Orally present their own report on Space through Talk/Drama for Writing • Look at, listen to and discuss science fiction and reports – non-fiction writing
<p>Reading</p> <ul style="list-style-type: none"> • Learn to apply their knowledge and skills 	<ul style="list-style-type: none"> • Reading a variety of texts weekly with the



<p>consistently to decode age appropriate texts fluently and accurately.</p> <ul style="list-style-type: none">• Begin to use textual cues to adapt tone, volume and intonation when reading aloud.• Recite and know by heart a range of texts using Talk for Writing techniques.• Identify the main ideas and themes in a text, giving examples from the text.• Make inferences when reading delving deeper into author’s meaning.• Discuss words and phrases that capture the reader’s interest and imagination. How can we use this when writing? How should I read this? Using expression when reading.• Predict what might happen from details stated and implied.• Retrieve and record information from non-fiction.• Ask and answer questions to improve their understanding of a text.• Identify how language, structure and presentation contribute to meaning.• Answer questions related to texts using literal, inferential and applied knowledge comprehension skills.	<p>teacher during Guided Reading Activities</p> <ul style="list-style-type: none">• Completing reading comprehension activities• Reading aloud to practice reading with fluency and expression• Using Overdrive to access a wide range of books• Visiting the library and modeling to younger students how to pick appropriate yet challenging books• Discuss the features of science fiction texts• Read reports on space and planets• List the features of a report and the difference between fiction and non-fiction.• Read a range of books independently from the reading corner and library.
<p>Writing</p> <ul style="list-style-type: none">• Use the dictionary and thesaurus to aid in spelling and increase vocabulary.• Practise weekly spelling words and learn to use them in writing. Applying this knowledge when editing work.• Improve the legibility, consistency and quality of handwriting.• Compose and rehearse sentences through a variety of activities including Talk/Drama for Writing.• Capture ideas using planning formats (e.g. story map, boxing up)• Plan writing to suit an audience and purpose.• Develop character and setting in narratives.• Use simple organisational devices.• In narratives, develop and extend ideas in	<p>Science Fiction</p> <ul style="list-style-type: none">• Writing Science fiction - narrative• Plan, draft, edit and proof-read a science fiction text• Using and applying their imagination to create a sequential story• Practising timed writing tasks to help enhance their time management• Sequence events in a narrative through story mapping or reconstructing the text.• Identify the purpose, audience, structure and language features of narrative.• Evaluate their own and others independent writing.• Plan, draft, edit and proofread a variety of fiction and non-fiction texts as part of ‘Wicked Writing’.



<p>logically sequenced sentences to create settings, characters and plots</p> <ul style="list-style-type: none">• Work with sentences of varying length, include the use of figurative language and employ a variety of connectives to make writing more interesting.• Use nouns, pronouns and tenses accurately and consistently throughout• Use different punctuation correctly including that for speech• Evaluate their own writing according to purpose, the effectiveness of word choice, grammar and punctuation.• Revise own writing being able to make additions and corrections to improve result.	<p>Reports</p> <ul style="list-style-type: none">• Writing reports.• Plan, draft, edit and proof-read a text linked to space using non-fiction style language• Evaluate their own and others independent writing• Plan, draft, edit and proofread a variety of fiction and non-fiction texts as part of 'Wicked Writing'• Sequence events in report through story mapping or reconstructing the text.• Identify the purpose, audience, structure and language features of a report.• Plan, draft, edit and proof-read a report on Space, linked to Topic.• Evaluate their own and others independent writing.• Plan, draft, edit and proofread a variety of fiction and non-fiction texts as part of 'Wicked Writing'.
<p>Handwriting</p> <ul style="list-style-type: none">• Use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined• Improve the legibility, consistency and quality of their handwriting.	<ul style="list-style-type: none">• Practising writing with a joined cursive script• Applying their best handwriting in all areas of the curriculum• Handwriting practice at least 3 times a week• Focus on joining - starting with simple joins.• Practise spacing letters consistently and keeping ascenders and descenders in proportion.
<p>Mathematics</p>	
<p>Number – Place value</p> <ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Order numbers• Identify the value of digits in a 7-digit number• Rounding numbers• Positive and negative numbers• Recognizing, reading and writing Roman numerals• Number sequencing



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.

Number – Multiplication and division

- Multiply and divide numbers mentally drawing upon known facts.
- Multiply and divide whole numbers by 10, 100 and 1000.
- 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.
- 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.
- Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.

Statistics

- Solve comparison, sum and difference

- Add/subtract 1s, 10s, 100s and 1000s to/from numbers.
- Explain their choice of strategy and choose a different strategy to check the answer.
- Solve addition and subtraction sums using the column method
- Count on and back in steps of 2, 3, 4, 5 and 10 to at least 100.
- Working on multi-step problems and understanding the different methods to approach this problem.

- Multiply/divide by 10s, 100s and 1000s
- Looking at number patterns.
- Explain their choice of strategy and choose a different strategy to check the answer.
- Recognizing and understand square number and cube numbers by looking for patterns.
- Working on multi-step problems and understanding the different methods to approach this problem.
- Understanding and using the language of: multiples, factors, squares and cubes

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs



<p>problems using information presented in a line graph.</p> <ul style="list-style-type: none">• Complete, read and interpret information in tables including timetables	<ul style="list-style-type: none">• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
Science	
<p>Physics/Biology</p> <ul style="list-style-type: none">• Children will plan different types of enquiry to answer questions.• Children will recognise and control variables where necessary.• They will make their own decisions about what observations to make, what measurements to use, and how long make them for.• Children will record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. They should report and present findings from enquires, including conclusions, causal relationships and explanations of results (in oral and written forms).• Children will use test results to make predictions to set up further comparative and fair test. They should use simple models to describe scientific ideas. They should identify scientific evidence that has been used to support or refute ideas or arguments.• They will use their results to identify when further tests and observations might be needed	<ul style="list-style-type: none">• Earth and Space (Earth relative to the Sun, Moon relative to the Earth, Relationship between Sun, Earth and Moon, Earth's rotation, Day and Night)• Forces (Gravity, Air Resistance, Water resistance, Friction) Gears, Pulleys, Levers and Springs• Microorganisms (as related to disease and decay)
Computing	
<p>We Are Game Developers</p> <ul style="list-style-type: none">• Develop typing skills• Learn how to use Scratch to write code• Make our own educational game• Be familiar with semaphore and Morse code, demonstrating the need for private information to be encrypted.• Encrypt and decrypt messages in simple ciphers, appreciating the need	<ul style="list-style-type: none">• Use BBC dance mat to learn how to type correctly• Evaluate games made using Scratch• Learn how to write code• Test games made by class members and evaluate how we can improve our own games.



<p>to use complex passwords and to keep them secure.</p> <ul style="list-style-type: none">• Identify the basics of how encryption works on the web	
History	
<p>The space race – history of space exploration</p> <ul style="list-style-type: none">• Children can arrange events in order and draw an appropriate timeline, including examples of evidence.• Children can describe some of the main changes in space travel, using the correct historical terms.	<ul style="list-style-type: none">• Studying lunar landing and space flight, that space race
Geography	
<p>Surfaces of planets /Globalisation</p> <ul style="list-style-type: none">• Look at resources from around the world and understand how they are changing and why• Use a wide range of resources to find out information• Use appropriate vocabulary• Use first and secondary sources of information	<ul style="list-style-type: none">• Looking at the surface of the moon and Mars (Mars rover)• Globalisation – the effect of globalization on resources, technologies and population• Our carbon footprint• How to utilize water/air and other resources to create energy
Art/Design Technology	
<p>Space art – Peter Thorpe</p> <ul style="list-style-type: none">• Develop and imaginatively extend ideas from starting points throughout the curriculum.• Collect information, sketches and resources and present ideas imaginatively in a sketch book.• Use the qualities of materials to enhance ideas.• Spot the potential in unexpected results as work progresses.• Comment on artworks with a fluent grasp of visual language.• Use tools to carve and add shapes, texture and pattern.• Combine visual and tactile qualities. <p>DT – Structures</p> <ul style="list-style-type: none">• Studying different materials and types of structures	<ul style="list-style-type: none">• Shading and blending through sketching• use of pastel colours and charcoal• Focus on Peter Thorpe – space art <ul style="list-style-type: none">• Structures – designing structures• Creating a free standing structure with certain parameters to be determined on the reason



<ul style="list-style-type: none"> • Exploring different methods to create a stable structure • Understand why different structures are made of different materials • Test different materials to determine which one will work best for the type of structure designed. 	<p>for building</p>
<p>PSHE</p>	
<p>How we learn</p> <ul style="list-style-type: none"> • understand that we are different and have different skills <p>Understanding self</p> <ul style="list-style-type: none"> • Being aware of our feeling and how to cope with stress <p>Being a good friend</p> <ul style="list-style-type: none"> • Coping with friendship issues and communication 	<ul style="list-style-type: none"> • Learning to learn • Self-awareness/feelings and emotions • Relationships/Managing conflict
<p>Music</p>	
<p>Graphic Scores and Soundscapes</p> <p>The students will explore different forms of notating music. Instead of traditional notation, they will create their own graphic scores which will represent a soundscape that they have composed. The students will perform their own work as well as analysing graphic scores from composers such as Cathy Berberian.</p>	<ul style="list-style-type: none"> • Create a graphic score by listening to a piece of music. • Interpret images using sounds. • Create and perform soundscapes using the body and class percussion. • Play and perform different types of graphic scores. • Complete and perform a graphic score in a group.
<p>Advertising and Jingles</p> <p>The students will look at the role music plays in advertising. They will compare and contrast different types of adverts such as radio adverts and television adverts. The students will then compose their own jingle for a product which will then turn into a whole advert using all the different techniques used.</p>	<ul style="list-style-type: none"> • Describe how effective advertising in all media uses music to enhance a product. • Describe how advertisers target specific audiences using music. • Research different jingles and the role they play in advertising. • Create a jingle for a given product. • Perform an advert in class.
<p>PE</p>	
<p>Unit 1: Football</p> <p>Unit 1 football will focus on re-capping the football skills developed in Year 4; controlling the ball, dribbling, passing, running with the ball, shooting and applying these more effectively and with increased control in games. The students will use tactics to help their team keep the ball and take it towards their opposition’s goal.</p> <p>They start by playing small-sided games with some fluency and accuracy. They will work on keeping</p>	<ul style="list-style-type: none"> • Ball control • Dribbling • Passing (short/long) • Running with the ball • Shooting • Team formations and positional understanding • Game play rules • Tactical 1: principles of defending • Tactical 2: principles of attacking



<p>possession of the ball as a team and understand that they need to defend as well as attack.</p>	
<p>Unit 2: Football In unit 2 football, the children will learn and develop special techniques; headers, volleys, defensive techniques, feints, goalkeeping techniques.</p> <p>They will start by playing small-sided games with increased fluency, accuracy, and confidence and increase to 5v5 team play.</p> <p>Students will start to pick out things that could be improved in performances and suggest ideas and practices to make them better</p>	<ul style="list-style-type: none">• Attacking• Defending• Headers• Volleys• Feints• Shooting• Goalkeeping• Rules• 5v5 game play
<p>Unit 3: Swimming (A/B) Handball (C/D)</p> <p>Swimming: All the students will be assessed over 25m swims in the first week of term (with or without an aid) and placed into ability groups when their class swims. Identification for Aqua Bears Primary can be decided from the assessment.</p> <p>Within these ability groups, students will be taught aquatic skills in Freestyle, Backstroke, Breaststroke and basic Butterfly body position and leg action for the more able. Some groups will also be taught, diving and correct stroke turns.</p> <p>Water skills activities and an understanding of water safety and pool rules will also be discussed with the students. Swim England Teaching Plan levels Duckling to 3-4 certificate level will be used by the teachers. Some students will be able to swim 25m on at least two to three recognised strokes. Less able students will have their lessons in the learner pool.</p> <p>Handball: The unit is designed to ensure that students acquire and develop the fundamental skills of handball. They will have the opportunity to apply their skills and to begin to consider tactics through a variety of individual, pair and group practices as well as a range of game scenarios.</p>	<p>Aquatic Skills include:</p> <ul style="list-style-type: none">• Body Position, leg action and arm action• Head positions and breathing• Sitting, crouching or racing dives• Refresh streamlining for all and sculling for the more able groups• A basic understanding of a minimum of 4 - 6 basic safety rules in and around the pool.• Developing water confidence in the less able swimmers in the learner pool• Developing a student's confidence to swim, with or without an aid, over a distance of 10m - 50m depending on ability, either legs only or independently with a recognized technique <p>For the more able refining the laws of swimming, starts, turns and finishes</p> <p>Key Skills include</p> <ul style="list-style-type: none">• Ball Familiarisation• Dribbling technique• Passing, receiving and introduce '3 step travelling'• Shooting• Introduce Attacking and defending positions & outwitting opponents• Assessment/Games/mini tournament