

Curriculum Information

Sycamore, Rowan and Larch November - December 2020

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Our topic for this half term is: To Infinity and Beyond

This includes:

- Science Earth and Space
 - Famous Scientists

Children will consider a selection of evidence that proves the Earth, Sun and Moon are all spherical before then making comparisons between the varying sizes using everyday objects and progressing to make informed estimations about the distances between them. Children will consider analogies which help explain why we perceive the Sun to be moving across the sky, whilst learning that it is the Earth rotating which creates this effect. They will then draw diagrams and make models to show what they have learned before progressing to learn about the phases of the Moon and what a lunar month is as well as studying data showing sunrise and sunset times.

Children will investigate Isaac Newton and Galileo Galileo Galileo and their contribution to science. They will then move onto explaining their work, especially in developing the theory of gravity. After gaining knowledge, children will progress to investigating how these scientists impact on science today.

Design Technology - Sundials

Children will begin by investigating the different shapes and sizes of sundials and evaluating their effectiveness. Using their understanding of how sundials work, children will progress to designing and making their very own sundial before then testing and evaluating it against a given product criterion.

Computing - Interactive Solar System

After learning about the orbit and rotation of the Moon around the Earth and the orbit and rotation of the Earth and the seven other planets around the Sun, the children will use Scratch to design, write and debug a simulation program of our solar system. When doing so, the children will need to think about the purpose of the simulation, their intended audience and what the most important aspect of their simulation will be.

English - **Recounts, narrative and Poetry** (Cosmic It's one giant leap for boy-kind)
Children will begin by exploring the front cover and an extract from the text before moving onto discussing their likes, dislikes, anything that puzzled them or reminds them of something else. The children will develop their inference skills by exploring the character's emotions, developing their emotive language before using this within their own poems. The children will then move onto exploring the relationship between the character and writing a diary in the role of a character. Finally, the children will discuss and evaluate how authors use language, including figurative language, considering impact on the reader before moving onto to writing their own Cosmic adventure.

Information and persuasive (Thing explainer and Curiosity: The story of a Mars rover)

During this unit, the children will explore a range of information to understand the purpose, structure, and language features. The children will develop the skills to be able to distinguish between fact and opinion. They will progress to designing their very own Mars Rover before writing a report and creating a persuasive advert.

Please use the school website to keep up to date with your child's learning. Teachers regularly update their class pages with photographs and important information for parents.



Geography - Investigating Coasts

Children will name some typical features of a coastline before explaining how these features are formed through erosion, weathering and deposition, as well as how these features are not normally all found together at the same place on a single stretch of coast. Finally, children will identify the location of some famous coastal features in the UK, such as the Needles on the Isle of Wight and Stack Rocks in Wales.

<u>Mathematics</u> - Multiplication & Division, Area & Perimeter, Fractions and Geometry Children in upper key stage 2 will develop and demonstrate mastery in their knowledge, skills and understanding of <u>number</u>, <u>fractions</u> (Yr6), aspects of <u>measure</u> and <u>geometry</u> as well as <u>statistics</u> this half term.

They will multiply and divide whole numbers by 10, 100 and 1000 whilst identifying multiples and factors, this including all factor pairs of a number and common factors of two numbers. Children will recognise square numbers and cube numbers, using the notation for squared (²) and cubed (³) as well as use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Children will then be able to establish whether a number up to 100 is prime and recall prime numbers up to 19.

When learning about the area and perimeter of shapes, children will measure the perimeter of composite rectilinear shapes in cm and m and calculate and compare the area of rectangles, including using standard units, cm², m². Children will also develop an understanding of estimating the area of irregular shapes.

When learning about fractions, children will use common factors to simplify fractions and use common multiples to express fractions in the same denomination. They will compare and order fractions, including fractions > 1 and generate and describe linear number sequences (with fractions). Children will learn to add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions to do this. Children will multiply simple pairs of proper fractions, writing the answer in its simplest form. As they continue to calculate with fractions, they will divide proper fractions by whole numbers and begin to associate a fraction with division. Finally, children will recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

As part of their COVID catch-up work, the children will read and interpret information presented in pictograms, bar charts and line graphs to solve comparisons as well as sum and difference problems. They will progress to drawing line graphs for a given set of data before finally completing, reading and interpreting information in tables, including two-way tables and timetables

The children's ability to '<u>reason'</u> will be developed throughout all of their mathematical work as they are continuously encouraged to explain, justify and deepen their thinking.

Other subjects:

R.E Christianity: The significance of Christmas **P.S.H.E** Celebrating Differences

Music Charanga

<u>P.E.</u> Multi-Skills and Daily Mile <u>French</u> Christmas: L'arbre de Noel <u>Parliament Work</u> Map what matters

Homework & Spellings:

<u>Google Classroom:</u> Details of homework and Star of the Week will continue to be posted in your child's Google Classroom every week as well as on the school website within their class page. In the event that your child's class bubble needs to isolate, details of home learning lessons will also be communicated in this way.

<u>Weekly Tasks</u>: Every <u>Monday</u>, your child will continue to be set two homework tasks: usually one English and one Maths, although sometimes it may be Science or Humanities based. They will have until the following Monday to complete and submit them. Homework will be based upon what they have been learning in class in order to consolidate their new knowledge, skills and understanding.

<u>Spellings</u>: Spellings will be set and tested each <u>Monday</u> (at present, Sycamore spellings are set and tested on a Tuesday). Your child should access <u>www.spellingframe.co.uk</u> little and often - rather than just on a Sunday - throughout the week to practise and memorise the words and spelling patterns they have been set. Your child should then complete at least two tests online in preparation for their test in class.

<u>Mental Maths</u>: Times Tables Rockstars (TTRS) should be used by the children on a <u>weekly</u> basis as part of their homework to develop their times tables skills - <u>https://ttrockstars.com</u>. There will often be a Battle of the Bands between classes or year groups, or within classes to encourage your child to access TTRS regularly.

Reading: Your child should access Reading Plus at home for a minimum of 30 minutes a week to help develop their fluency, vocabulary and confidence in their own reading, this is in addition to any time that is spent on it during their school day. Reading Plus is personalised to your child and their responses, so if they are struggling with a word or question please do not supply them with the answer. Some children also have user accounts for Pearson Bug Club online reading and your child's teacher will set them full texts to read and answer questions about.

<u>PE Kits:</u> Children should continue to come to school wearing their PE kit on a Tuesday. Whenever possible, PE will take place outdoors this half term so children should come to school dressed appropriately for the colder weather we expect in November and December.

<u>Wellies and outdoor shoes:</u> Please ensure that your child has a pair of named wellies or outdoor shoes available in school at all times for Forest School sessions, playtime as well as outdoor learning activities.

Once again, thank you for your ongoing support and positivity during these uncertain times. It was wonderful to finally have the children back in school last half term. We were so impressed with how well they responded and adapted to new routines as well as their calm, hard-working and positive attitudes toward the work.

Please remember that if you have any questions or queries, class teachers can still be contacted via email and telephone conversations organised should you need to discuss anything.

Take care everyone!

Mrs Murdy Miss Back Mr Warburton