# **Curriculum Information**

### Sycamore, Rowan & Larch

## November – December 2018

Produced by: Mrs C. Murdy, Miss C. Back and Mr K. Shotton www.swansfield.northumberland.sch.uk

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

#### This includes:

#### Science - Earth and Space

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.

#### **History** - Famous Scientists

Children will begin by investigating Isaac Newton and Galileo Galilei 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. They children will then present their findings using ICT.

#### **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 criteria.

#### **Computing** - Presentations

After covering Earth, Sun and Moon rotation the children will use Scratch to design a rotating model of the Earth, Moon and Sun. The children will use the programme Prezi to create a presentation about Newton or Galileo. This presentation tool allows the children to be more creative including videos and hyperlinks into their presentation.

#### English: - Recounts (Mars Evacuee / Space Hostage / Jedi Academy)

- Picture Book Adventures (Space Dog / Little Bell and the Moon)

#### - Slam Poetry (You wait till I'm older that you - Michael Rosen)

English involves the development of speaking and listening, drama, reading, comprehension, grammar and writing skills. Children will have a variety of opportunities to develop and demonstrate mastery within their reading and comprehension both in the classroom and during weekly guided reading sessions. They will also be able to apply their skills across other areas of the curriculum during their topic work. During their English lessons, children will be working from cross curricular units of work, each of which will last between 2-4 weeks. Each term, children will experience a range of narrative, non-fiction and poetry texts.

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.







#### Mathematics: Multiplication & Division, Area & Perimeter, Fractions and Geometry

Children will develop and demonstrate mastery in their knowledge, skills and understanding of <u>number</u>, <u>fractions</u> and <u>geometry</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 (<sup>2</sup>) and cubed (<sup>3</sup>) 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, cm<sup>2</sup>, m<sup>2</sup>. 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

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:

P.E. Swimming and Dance	<b><u>R.E</u></b> Christianity: Festivals	<u> P.S.H.E</u>
Relationships		
<b><u>French</u></b> French songs and rhymes	Music Charanga and Recorder Tuition	

#### Homework & Spellings:

<u>Weekly Tasks</u>: Every <u>Monday</u>, your child will be set two homework tasks: one English and one Maths. They will have until the following Monday to complete them. Their homework tasks may be written comprehension, punctuation and grammar, written pieces or online tasks from Sumdog or School 360. They will be based upon what they have been learning in class in order to consolidate their new knowledge, skills and understanding.

**Spellings:** Spellings will be set and tested each Monday.

<u>Mental Maths</u>: J2Blast on School360 and Times Tables Rockstars should be used by the children on a <u>weekly</u> basis to develop their times tables skills. Metal maths skills will be tested on a weekly basis.

**<u>Reading</u>**: Guided Reading will take place on a <u>weekly</u> basis (Larch and Sycamore: Monday / Rowan: Wednesday) \*\**Please ensure that both yourself and your child comment regularly in the reading record.* 

Also, it is important that your child reads a range of literature (magazines, books, newspapers) for at least <u>one hour per week</u> so please encourage them to use both the school library and local library.

**Planners:** Children will record homework, PE days and important dates in these. We ask that you sign their planner every week, it is also available to communicate with your child's teacher.

**<u>Pencil cases:</u>** We would like to encourage all children to have a pencil case at school. As a minimum, each child's pencil case should contain: two black biro pens, a pencil and sharpener, a ruler and a rubber, this being in preparation for High School.

**<u>PE Kits</u>**: Children must have both an indoor and outdoor PE Kit in school on a <u>Friday</u> along with appropriate footwear. The school's expectations of these kits can be found in your child's planner (Page 5).

Wellies and outdoor shoes: Please ensure that your child has a pair of named wellies or outdoor

shoes available in school at all times for playtime as well as outdoor learning activities.