

**MAYFIELD PREPARATORY SCHOOL**  
**SPRING TERM 2020 PROGRAMMES OF STUDY FOR LOWER III**

<b>MATHEMATICS</b>	<ol style="list-style-type: none"><li>1. <u>Calculating</u><ul style="list-style-type: none"><li>• multiply and divide multi-digit numbers up to 4 digits by a two-digit whole number using formal written methods</li><li>• perform mental calculations, including with mixed operations and large numbers</li><li>• identify common factors, common multiples and prime numbers</li><li>• use their knowledge of the order of operations to carry out calculations involving the four operations</li><li>• solve problems involving addition, subtraction, multiplication and division</li><li>• use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</li></ul></li><li>2. <u>Statistics</u><ul style="list-style-type: none"><li>• interpret and construct pie charts and line graphs and use these to solve problems</li><li>• calculate and interpret the mean as an average.</li></ul></li><li>3. <u>Fractions</u><ul style="list-style-type: none"><li>• use common factors to simplify fractions</li><li>• compare and order fractions, including fractions <math>&gt; 1</math></li><li>• add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</li><li>• multiply simple pairs of proper fractions, writing the answer in its simplest form</li><li>• divide proper fractions by whole numbers</li><li>• associate a fraction with division and calculate decimal fraction equivalents</li><li>• identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places</li><li>• solve problems which require answers to be rounded to specified degrees of accuracy</li><li>• recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</li></ul></li><li>4. Ratio and proportion<ul style="list-style-type: none"><li>• solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</li><li>• solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison</li><li>• solve problems involving similar shapes where the scale factor is known or can be found</li><li>• solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</li></ul></li><li>5. Algebra<ul style="list-style-type: none"><li>• use simple formulae</li><li>• generate and describe linear number sequences</li><li>• express missing number problems algebraically</li><li>• find pairs of numbers that satisfy an equation with two unknowns</li><li>• enumerate possibilities of combinations of two variables.</li></ul></li><li>6. Measure<ul style="list-style-type: none"><li>• solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</li><li>• use, read, write and convert between standard units, converting measurements of length, mass, volume and time</li></ul></li></ol>
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	<ul style="list-style-type: none"> <li>• convert between miles and kilometres</li> <li>• recognise that shapes with the same areas can have different perimeters and vice versa</li> <li>• recognise when it is possible to use formulae for area and volume of shapes</li> <li>• calculate the area of parallelograms and triangles</li> <li>• calculate, estimate and compare volume of cubes and cuboids using standard units</li> </ul> <p>Children will be assessed prior to teaching each of the units above. Work will be differentiated to meet the needs of the children.</p>
<b>ENGLISH</b>	<p><b><u>Comprehension</u></b></p> <ul style="list-style-type: none"> <li>• Selecting and retrieving information</li> <li>• Using the text to support answers</li> <li>• Deduce/infer/interpret information</li> <li>• Considering an author’s intentions and the effect of a text on the reader</li> <li>• Comment on the purpose and viewpoint of a text</li> <li>• SATS examination techniques – answering different question types related to the National Curriculum contents domains.</li> </ul> <p><b><u>Grammar and Punctuation: Re-cap and Revise</u></b></p> <ul style="list-style-type: none"> <li>• Complex sentences – Co-ordinating connectives/subordinate connectives</li> <li>• Idioms</li> <li>• Nouns/Noun phrases</li> <li>• Use of adverbials</li> <li>• Types of sentence</li> <li>• Layout devices</li> <li>• Hyphens and dashes</li> <li>• Brackets</li> <li>• The infinitive form</li> <li>• Synonyms</li> <li>• Antonyms</li> <li>• Prefixes/Suffixes</li> <li>• Grammar revision</li> </ul> <p><b><u>Writing</u></b></p> <p><b>Fiction:</b> Creative writing – writing from a stimulus using ‘The Giant’s Necklace’ short story. Instructional writing (fantasy theme).</p> <p><b>Non-fiction:</b> Biographical writing.</p> <p>Focus on discussion writing – presenting a balanced argument.</p> <p>Cross-curricular writing related to this term’s History topic.</p>
<b>SCIENCE</b>	<p><b><u>Electricity</u></b></p> <p>Pupils begin with revision of simple circuits, hands on experience with symbols, diagrams &amp; incomplete circuits. Pupils investigate the variables that can impact on a circuit, comparing series and parallel circuits. Pupils then face some challenges!</p> <p><b>Light</b> – Pupils will be exploring how light travels onto objects and seen by human eyes. They will be looking at the structure and function of a real eye. They will also be investigating how light travels.</p>
<b>HISTORY</b>	<p>This terms enquiry will be investigating and exploring how medical breakthroughs of the last two hundred and fifty years have affected the lives of people in Britain. Children will look at the following: life expectancy and how it has changed; the Great Plague; Edward Jenner and the impact he has had on the health of people in Britain and the main medical milestones in British History.</p>

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<b>GEOGRAPHY</b>	Continue to study various National Parks and the impact they have upon the landscape of the United Kingdom. As case studies, children will investigate the importance of the Merrivale, as well as looking at the role of farmers in and across our National Parks.
<b>INFORMATION AND COMMUNICATION TECHNOLOGY</b>	Spread sheet skills – students will learn how to create a spread sheet that uses formulas to run and manage the budget of a virtual zoo!
<b>PHYSICAL EDUCATION</b>	<b>Gymnastics:-</b> Theme – Partners. Mirroring and cannon – matching and shadowing counter balances. <b>Cross Country</b> – sustained run over 1500 metres.
<b>GAMES</b>	<b>Girls Games</b> – Netball skills. High Five and Seven-a-side. <b>Boys Games</b> – Rugby.
<b>MUSIC</b>	<b>Classroom orchestra:</b> To be able to perform a part independently within a whole class group on an appropriate instrument, extending the ability to perform on that instrument as required.  <b>Composition skills:</b> To gain an understanding of primary chords and how they interact with a melody and bass line to be able to compose a short piece of reggae music.  Concert Preparation: To prepare a performance for the Spring Concert.
<b>CURRENT AFFAIRS</b>	Discussion and debate on topics which occur in the news in the United Kingdom around the world. Learn about 'Individual Liberty', one of the British core values.
<b>RELIGIOUS EDUCATION</b>	Learning and reading sacred texts within various religions. Is there a common theme? Identifying similarities and differences.
<b>PSD</b>	Recognising and respecting that all people are individuals. That human beings possess different qualities that make us unique.
<b>ART</b>	<b>Drawing in Perspective</b> The pupils will create a townscape Pupils will be learning how to draw using perspective and vanishing points. We will be looking at painters in history who have used perspective to create landscapes and cityscapes, such as Leonardo da Vinci, Fra Angelico, Paolo Uccello.
<b>SPEECH &amp; DRAMA</b>	Preparation for Grade 2 and 3 LAMDA examinations in Spoken English and/or Verse and Prose at the end of the Spring Term
<b>FRENCH</b>	Your school; school material; likes and dislikes; where you live; family; transport; develop speaking, listening, writing, reading and translation skills