

| ENGLISH - Priority Objectives for pupils to master by the end of Year 3  |                                  | MATHS - Priority Objectives for pupils to master by the end of Year 3   | SCIENCE - Topics / Knowledge Covered  |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
|--|----------------------------------|---|---|------|-----------------|---|----------------------------------|---|-------|---|--------------------------|---|-------------|---|------------------|---|------------------------|
| <b>National Curriculum (Statutory)</b>   |                                  |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| <b>Spoken Language / Oracy:</b> <ul style="list-style-type: none"> <li>- Articulate and justify answers, arguments and opinions</li> <li>- Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings</li> <li>- Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments</li> <li>- Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas</li> <li>- Speak audibly and fluently with an increasing command of Standard English</li> <li>- Participate in discussions, presentations, performances, role play, improvisations and debates</li> <li>- Taking turns, listening to what others say</li> </ul>  |                                  | <b>Number &amp; Place Value:</b> <ul style="list-style-type: none"> <li>- Count in multiples of 6, 7, 9, 25 and 1000</li> <li>- Find 1000 more or less than a given number</li> <li>- Count backwards through zero to include negative numbers</li> <li>- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)</li> <li>- Order and compare numbers beyond 1000</li> <li>- Identify, represent and estimate numbers using different representations</li> <li>- Round any number to the nearest 10, 100 or 1000</li> <li>- Solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</li> </ul>  | <table border="1"> <thead> <tr> <th>Term</th><th>Knowledge Focus</th></tr> </thead> <tbody> <tr> <td>1</td><td>Living things and their habitats</td></tr> <tr> <td>2</td><td>Sound</td></tr> <tr> <td>3</td><td>Animals including humans</td></tr> <tr> <td>4</td><td>Electricity</td></tr> <tr> <td>5</td><td>States of matter</td></tr> <tr> <td>6</td><td>Working scientifically</td></tr> </tbody> </table>                                     | Term | Knowledge Focus | 1 | Living things and their habitats | 2 | Sound | 3 | Animals including humans | 4 | Electricity | 5 | States of matter | 6 | Working scientifically |
| Term   | Knowledge Focus                  |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| 1  | Living things and their habitats |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| 2  | Sound                            |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| 3  | Animals including humans         |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| 4  | Electricity                      |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| 5  | States of matter                 |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| 6  | Working scientifically           |   |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| <b>Reading - word reading</b>  |                                  | <ul style="list-style-type: none"> <li>- Apply their knowledge of root words, prefixes and suffixes to read aloud and understand words.</li> <li>- Read further exception words noting the unusual correspondences between spelling and sound and where these occur in the word</li> </ul>  | <b>Number: Addition &amp; Subtraction:</b> <ul style="list-style-type: none"> <li>- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>- Estimate and use inverse operations to check answers to a calculation</li> <li>- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul> |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| <b>Reading - comprehension (to develop an understanding of what they have read)</b> <p><u>Understanding what they read in books and can read independently by:</u></p> <ul style="list-style-type: none"> <li>- Checking the text makes sense to them</li> <li>- Discuss their understanding of the text and explain the meaning of words in context (precision)</li> <li>- Ask questions to improve their understanding of the text.</li> <li>- Draw inferences such as inferring characters thoughts, feelings and motives.</li> <li>- Justify their inferences using the text with evidence</li> <li>- Predict what might happen from details stated and implied.</li> <li>- Identifying the main ideas drawn from more than one paragraph and summarise what happens in more than one paragraph.</li> <li>- Identify how language, structure and presentation contribute to meaning.</li> <li>- Retrieve and record information from non-fiction.</li> <li>- Participate in discussions about books that are read to them and those they can read for themselves</li> </ul>  |                                  | <b>Number: Multiplication &amp; Division:</b> <ul style="list-style-type: none"> <li>- Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> <li>- Recognise and use factor pairs and commutativity in mental calculations</li> <li>- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> <li>- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>  |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| <b>Reading for pleasure (develop a positive attitude to reading)</b> <ul style="list-style-type: none"> <li>- Listen to and read a wide range of texts.</li> <li>- Use dictionaries to check the meaning of words.</li> <li>- Increase their knowledge of different books and retell some stories orally.</li> <li>- Identify themes and conventions in a range of books.</li> <li>- Read aloud poems showing understanding through intonation, tone, volume and action.</li> <li>- Discuss words and phrases that catch their interest.</li> <li>- Recognise different types of poems e.g. free verse and narrative poetry.</li> </ul>  |                                  | <b>Number: Fractions &amp; Decimals</b> <ul style="list-style-type: none"> <li>- Recognise and show, using diagrams, families of common equivalent fractions</li> <li>- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> <li>- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</li> <li>- Add and subtract fractions with the same denominator</li> <li>- Recognise and write decimal equivalents of any number of tenths or hundredths; recognise and write decimal equivalents to <math>4\frac{1}{2}</math>, <math>2\frac{1}{2}</math>, <math>4\frac{3}{4}</math></li> <li>- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>- Round decimals with one decimal place to the nearest whole number</li> <li>- Compare numbers with the same number of decimal places up to two decimal places</li> <li>- Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul> | <b>Link to Knowledge &amp; Concept Organisers:</b><br><a href="#">Year 4 Science Curriculum Progression...</a>  |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| <b>Writing: spelling</b> <ul style="list-style-type: none"> <li>- Use the prefixes: dis, mis, in, il, im, ir, re, sub, inter, super, anti, auto</li> <li>- Use the suffixes: ing, er, ed, s, es, ly, ation, ous,</li> <li>- Spell further homophones correctly.</li> <li>- Spell 50% of the Year 3 and 4 common exception words correctly.</li> <li>- Use apostrophes for plurals correctly.</li> <li>- Use the first 2 or 3 letters to check how to spell a word in a dictionary.</li> <li>- Write from memory and dictation simple sentences using words and punctuation taught so far</li> <li>- /ɪ/ sound spelt y e.g. pyramid, Egypt</li> <li>- /ʌ/ sound spelt ou e.g. young, country</li> <li>- /ə/ is spelt –sure. E.g. treasure, enclosure</li> <li>- /tʃə/ is often spelt –ture e.g. creature, furniture</li> <li>- /ʒən/ is spelt as –sion. E.g. division, invasion</li> <li>- tion, sion, ssion and cian (invention, expansion, expression, musician)</li> <li>- /k/ sound spelt ch e.g. scheme, chorus</li> <li>- /ʃ/ sound spelt ch e.g. chef, chalet</li> <li>- /g/ sound spelt que e.g. league and tongue</li> <li>- the /k/ sound spelt –que e.g. antique and unique</li> <li>- the /s/ sound spelt sc e.g. science and scene</li> <li>- the /eɪ/ sound spelt ei, eigh, or ey (e.g. vein, weigh, grey)</li> </ul> |                                  | <b>Measurement:</b> <ul style="list-style-type: none"> <li>- Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <li>- Find the area of rectilinear shapes by counting squares</li> <li>- Estimate, compare and calculate different measures, including money in pounds and pence Mathematics – key stages 1 and 2 Statutory requirements</li> <li>- Read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul>  | <b>Link to Progression on Working Scientifically:</b><br><a href="#">Edited Science Skills Progression Map</a>  |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| <b>Writing: handwriting</b> <ul style="list-style-type: none"> <li>- Write in cursive, joining letters correctly.</li> <li>- Increase the legibility, consistency and quality of their handwriting.</li> </ul>   |                                  | <b>Geometry: Properties of Shape:</b> <ul style="list-style-type: none"> <li>- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>- Identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>- Identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>- Complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ul>   | <b>Eco / Environmental / Outdoor:</b><br><a href="#">2021 Eco Day Autumn</a>  |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |
| <b>Writing: composition</b> <ul style="list-style-type: none"> <li>- Discuss and record their ideas.</li> <li>- Discuss texts similar to what they are writing in order to model structure, vocabulary and grammar.</li> <li>- Compose and rehearse sentences orally with rich vocabulary.</li> <li>- Organise paragraphs around a theme.</li> <li>- Create settings, characters and plot for narratives.</li> <li>- Use organisational devices such as headings and subheadings.</li> <li>- Assess the effectiveness of writing and suggest improvements.</li> </ul>  |                                  | <b>Geometry: Position &amp; Direction:</b> <ul style="list-style-type: none"> <li>- Describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>- Describe movements between positions as translations of a given unit to the left/right and up/down</li> </ul>  |   |      |                 |   |                                  |   |       |   |                          |   |             |   |                  |   |                        |

Lovelace Primary School - Key Curriculum Content for Year 4 - Smarter, Healthier, Happier

|   |  |  |
|---|--|--|
|   | <ul style="list-style-type: none"> <li>- Improve their grammar, such as ensuring accurate use of pronouns in sentences.</li> <li>- Proof read for spelling and punctuation errors.</li> <li>- Read aloud their writing to a group or class, using appropriate intonation, tone and volume to portray meaning.</li> </ul>   | <ul style="list-style-type: none"> <li>- Plot specified points and draw sides to complete a given polygon</li> </ul>   |
| <b>Writing: vocabulary, grammar &amp; punctuation</b> | <ul style="list-style-type: none"> <li>- Use a range of conjunctions, e.g. when, if, because, although.</li> <li>- Use the present perfect form of verbs.</li> <li>- Choose nouns or pronouns appropriately.</li> <li>- Use conjunctions, adverbs and prepositions to show time and cause.</li> <li>- Use fronted adverbials, with a comma after them.</li> <li>- Use and punctuate direct speech.</li> <li>- Use apostrophes for possession.</li> </ul> | <p><b>Statistics:</b></p> <ul style="list-style-type: none"> <li>- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> <li>- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul> |
| <b>Range of Writing Purposes / Audiences:</b>         | Missing poster, Non-fiction fact page, Instructions, Poetry  |  |
| <b>Grammar Appendix (NC / Statutory)</b>              |  |  |
| Word  | <ul style="list-style-type: none"> <li>- Formation of nouns using prefixes.</li> <li>- Using a and an correctly.</li> <li>- Understanding how word families are related in form and meaning.</li> </ul>  |  |
| Sentence  | <ul style="list-style-type: none"> <li>-Expressing time, place and cause using conjunctions [for example, when, before, after, while, so, because], adverbs [for example, then, next, soon, therefore], or prepositions [for example, before, after, during, in, because of]</li> </ul>  |  |
| Text  | <ul style="list-style-type: none"> <li>-Introduction to paragraphs as a way to group related material</li> <li>- Headings and sub-headings to aid presentation</li> <li>-Use of the present perfect form of verbs instead of the simple past</li> </ul>  |  |
| Punctuation   | <ul style="list-style-type: none"> <li>-Introduction to inverted commas to punctuate direct speech</li> </ul>  |  |
| Terminology   | <ul style="list-style-type: none"> <li>preposition, conjunction word family, prefix clause, subordinate clause direct speech consonant, consonant letter vowel, vowel letter inverted commas (or 'speech marks')</li> </ul>  |  |

|  |  |   |  |  |  |  |  |                        |
|--|--|---|--|--|--|--|--|------------------------|
|  |  | making, shading, observational drawing and still life.<br><br><a href="#">Summer 1 - Still Life</a><br><br><b>Summer 2:</b> Indian art: lines, shapes and patterns using colour mixing in different mediums.<br><br><a href="#">India art</a> |  |  |  |  |  | (continuous provision) |
|--|--|---|--|--|--|--|--|------------------------|

|  |  |  |  |  |   |   |
|--|--|--|--|--|---|---|
| <b>Educational Visits, Residential Trips, Visiting Groups<br/>WOW / 101 Experiences / Special Days and Events for the Development of Character</b> | <b>Term 1</b><br>101LE Create and perform a dance routine<br>101LE Organise your user account on a computer<br>101LE Adopt and a native tree and watch it grow<br><br>Ada Lovelace Day (STEM)<br>School Grounds / Outdoor Learning Day | <b>Term 2</b><br>101LE Create an exploding volcano<br>101LE Sing in a choir<br>101LE Fold paper through origami<br><br>Children in Need<br>Remembrance<br>Dress the Tree<br>Rose Theatre Trip<br>Readings for carol service and dress the tree<br>Hindu workshop | <b>Term 3</b><br>101LE Pantomime<br>101LE World Book day<br>101LE Learn to play a musical instrument | <b>Term 4</b><br>101LE Build a Viking boat<br>101LE Recreate a historic event<br>101LE Dress up like a roman<br>101LE Learn to play a musical instrument<br><br>101LE Swim 10m and learn how to be safe in water | <b>Term 5</b><br>101LE Learn to play a musical instrument<br>101LE Buy something from a shop and check change<br>101LE Make a recipe and cook it<br>101LE Plan and budget | <b>Term 6</b><br>101LE Learn to play a musical instrument<br>101LE Eat food from other cultures<br>101LE Cook outside safely on a campfire<br>101E Go on a nature walk at night<br><br>TYM<br>India Day |
|--|--|--|--|--|---|---|