



## Underhill Year 3 Programme of Study

<b>Autumn</b>	<b>1. Number sense and exploring calculation strategies</b>  <b>(3 weeks)</b>	<ul style="list-style-type: none"><li>• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li><li>• recognise the place value of each digit (tens, ones), compare and order numbers up to 100</li><li>• find 10 more or less than a given number</li><li>• read and write numbers up to 100 in numerals and in words</li><li>• solve number problems and practical problems involving these ideas</li><li>• identify, represent and estimate numbers using different representations, including the number line</li><li>• add and subtract amounts of money to give change, using both £ and p in practical contexts</li></ul>
	<b>2. Place value</b> <b>(2 weeks)</b>	<ul style="list-style-type: none"><li>• identify, represent and estimate numbers using different representations</li><li>• find 10 or 100 more or less than a given number</li><li>• recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</li><li>• compare and order numbers up to 1000</li><li>• read and write numbers up to 1000 in numerals and in words</li><li>• solve number problems and practical problems involving these ideas</li><li>• count from 0 in multiples of 50 and 100</li></ul>
	<b>3. Graphs</b>  <b>(1 week)</b>	<ul style="list-style-type: none"><li>• interpret and present data using bar charts, pictograms and tables</li><li>• solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables</li></ul>
	<b>4. Addition and subtraction</b>  <b>(3 weeks)</b>	<ul style="list-style-type: none"><li>• add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds</li><li>• add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</li><li>• estimate the answer to a calculation and use inverse operations to check answers</li><li>• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li></ul>
	<b>5. Length and perimeter</b>  <b>(2 weeks)</b>	<ul style="list-style-type: none"><li>• measure, compare, add and subtract: lengths (m/cm/mm)</li><li>• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li><li>• measure the perimeter of simple 2-D shapes</li><li>• continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed ... and simple equivalents of mixed units (for example, 5m = 500cm)</li></ul>



<b>Spring</b>	<b>6. Multiplication and division (2 weeks)</b>	<ul style="list-style-type: none"><li>• recall and use multiplication and division facts for the 3 and 4 multiplication tables</li><li>• count from zero in multiples of 4</li><li>• solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objects</li></ul>
	<b>7. Deriving multiplication and division facts  (3 weeks)</b>	<ul style="list-style-type: none"><li>• recall and use multiplication and division facts for the 3 and 4 multiplication tables</li><li>• write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for twodigit numbers times one-digit numbers, using mental and progressing to formal written methods</li><li>• solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objects</li><li>•</li></ul>
	<b>8. Time  (2 weeks)</b>	<ul style="list-style-type: none"><li>• tell and write the time using 12-hour analogue and digital clocks, including using Roman numerals from I to XII estimate and read time with increasing accuracy to the nearest minute record and compare time in terms of seconds, minutes and hours</li><li>• use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight</li><li>• know the number of seconds in a minute and the number of days in each month, year and leap year</li><li>• compare durations of events [for example to calculate the time taken by particular events or tasks]</li></ul>
	<b>9. Fractions  (3 weeks)</b>	<ul style="list-style-type: none"><li>• recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</li><li>• recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</li><li>• count up and down in tenths</li><li>• recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10</li><li>• recognise and show, using diagrams, equivalent fractions with small denominators</li><li>• add and subtract fractions with the same denominator within one whole [ for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math> ]</li><li>• compare and order unit fractions, and fractions with the same denominators</li><li>• solve problems that involve all of the above</li></ul>



<b>Summer</b>	<b>10. Angles and shape</b> <b>(3 weeks)</b>	<ul style="list-style-type: none"><li>• recognise angles as a property of shape or a description of a turn identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle identify horizontal and vertical lines and pairs of perpendicular and parallel lines</li><li>• draw 2-D shapes and make 3-D shapes using modelling materials</li><li>• recognise 3-D shapes in different orientations and describe them</li><li>• measure the perimeter of simple 2-D shapes</li></ul>
	<b>11. Measures</b> <b>(3 weeks)</b>	<ul style="list-style-type: none"><li>• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li><li>• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</li><li>• continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1 kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm)</li></ul>
	<b>12. Securing multiplication &amp; division</b> <b>(1 week)</b>	<ul style="list-style-type: none"><li>• write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for twodigit numbers times one-digit numbers, using mental and progressing to formal written methods</li><li>• recall and use multiplication and division facts for the 8 multiplication tables</li><li>• count from zero in multiples of 8</li></ul>
	<b>13. Exploring calculation strategies and place value</b> <b>(2 weeks)</b>	<ul style="list-style-type: none"><li>• add and subtract numbers mentally find 1000 more or less than a given number; recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (Y4)</li><li>• order and compare numbers beyond 1000 (Y4) round any number to the nearest 10, 100 or 1000 (Y4)</li></ul>