## MATHEMATICS ASSESSMENT RECORD

YEAR 3

| Number and Place Value | Introduction | Independence | Application | Mastery | Surpassing |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number |  |  |  |  |  |
| Recognise the place value of each digit in a 3-digit number (100s, 10s, 1s) |  |  |  |  |  |
| Compare and order numbers up to 1,000 |  |  |  |  |  |
| Identify, represent and estimate numbers using different representations |  |  |  |  |  |
| Read and write numbers up to 1,000 in numerals and in words |  |  |  |  |  |
| Solve number problems and practical problems involving these ideas |  |  |  |  |  |
| Addition and Subtraction |  |  |  |  |  |
| Add and subtract numbers mentally, including: <br> - a three-digit number and 1 s |  |  |  |  |  |
|  |  |  |  |  |  |
| - a three-digit number and 100s |  |  |  |  |  |
| Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction |  |  |  |  |  |
| Estimate the answer to a calculation and use inverse operations to check answers |  |  |  |  |  |
| Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction |  |  |  |  |  |
| Multiplication and Division |  |  |  |  |  |
| Recall and use multiplication and division facts for the 3,4 and 8 multiplication tables |  |  |  |  |  |
| Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods |  |  |  |  |  |
| Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which $n$ objects are connected to m objects | $5$ |  |  |  |  |
| Fractions |  |  |  |  |  |
| Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 |  |  |  |  |  |
| Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators |  |  |  |  |  |
| Recognise and use fractions as numbers: unit fractions and nonunit fractions with small denominators |  |  |  |  |  |
| Recognise and show, using diagrams, equivalent fractions with small denominators |  |  |  |  |  |
| Add and subtract fractions with the same denominator within one whole [for example, $5 / 7+1 / 7=6 / 7$ ] |  |  |  |  |  |
| Compare and order unit fractions, and fractions with the same denominators |  |  |  |  |  |
| Solve problems that involve all of the above |  |  |  |  |  |
| Measurement |  |  |  |  |  |
| Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) |  |  |  |  |  |
| Add and subtract amounts of money to give change, using both $£$ and $p$ in practical contexts |  |  |  |  |  |
| Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12 -hour and 24 -hour clocks |  |  |  |  |  |
| Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight |  |  |  |  |  |
| Know the number of seconds in a minute and the number of days in each month, year and leap year |  |  |  |  |  |
| Compare durations of events [for example, to calculate the time taken by particular events or tasks] |  |  |  |  |  |
| Measure the perimeter of simple 2-D shapes |  |  |  |  |  |
| Properties of Shape |  |  |  |  |  |


| Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recognise angles as a property of shape or a description of a turn |  |  |  |  |  |  |  |
| Identify horizontal and vertical lines and pairs of perpendicular and parallel lines |  |  |  |  |  |  |  |
| Statistics |  |  |  |  |  |  |  |
| Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs |  |  |  |  |  |  |  |
| Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs |  |  |  |  |  |  |  |

