## YEAR 3 COVERAGE

## Expectations

- Teachers should plan to cover all objectives in a year
- Some objectives may need longer than others based on teacher assessment of children's understanding
- Teachers should plan to teach objectives so children acquire the knowledge needed to be successful but all children should also be developing their problem-solving skills across the different areas of Maths
- Activities should be context driven - money, measures, real life - where possible

At the end of each half term (minimum) please highlight objectives which have been taught. This will help you monitor your coverage throughout the year. If you are returning to an objective, highlight over it in a different colour or add an asterisk. Note: this is not an assessment document.

## REASONING AND PROBLEM SOLVING <br> Developed Throughout Key Stage Two

- Use mathematics as an integral part of classroom activities, including in other areas of the curriculum
- Be able to recall and apply knowledge rapidly and accurately
- Conjecture relationships and generalisations
- Develop an argument, justification and/or proof using mathematical language
- Explain why an answer is correct
- Try different approaches and find ways of overcoming difficulties when solving problems
- Apply mathematics to routine and non-routine problems
- Break down problems into a series of smaller steps
- Persevere in seeking solutions
- Follow a line of enquiry
- Collate, organise and compare information
- Present information and results in a clear and organised way
- Read and spell mathematical vocabulary accurately
- Organise work, check results and explain thinking

| NUMBER |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | $\begin{gathered} \text { NUMBER \& } \\ \text { PLACE VALUE } \end{gathered}$ | $\begin{aligned} & \text { ADDITION \& } \\ & \text { SUBTRACTION } \end{aligned}$ | MULTIPLICATION \& DIVISION | MONEY | FRACTIONS | STATISTICS |
| $3$ | 3NV1 Count from 0 in multiples of 4 and 8 | 3AS1 Solve varied addition and subtraction questions using mental calculations with two-digit numbers; the answers may exceed 100 | 3MD1 Recall and use multiplication and division facts for the 3 multiplication tables | 3MY1 Add amounts of money using both $£$ and $p$ in practical contexts | 3FP1 Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts | 3ST1 Interpret and present data using pictograms |
|  | 3NV2 Count from 0 in multiples of 50 and 100 | 3AS2 Add and subtract a three-digit number and ones mentally [e.g. 369-7; 254-9] | 3MD2 Recall and use multiplication and division facts for the 4 and 8 multiplication tables | 3MY2 Add and subtract amounts of money to give change, using both $£$ and p in practical contexts | 3FP2 Count up and down in tenths; recognise that tenths arise from dividing one-digit numbers or quantities by 10 . Connect tenths to place value and division by 10 | 3ST2 Solve one-step questions using information presented in scaled pictograms [e.g. 2,5,10 units per cm] |
|  | 3NV3 Find 10 or 100 more or less than a given number | 3AS3 Add and subtract a three-digit number and tens mentally <br> [e.g. $459+10 ; 263+30 ; 529-20$ ] | 3MD3 Through doubling, connect the 2,4 and 8 multiplication tables | 3MY3 Begin to use decimal notation related to money (e.g. $£ 1.45=145$ p) | 3FP3 Recognise, find and write fractions of a discrete set of objects using unit fractions with small denominators | 3ST3 Interpret and present data using bar charts |
|  | 3NV4 Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) | 3AS4 Add and subtract a three-digit number and hundreds mentally [643 + 200; 475-300] | 3MD4 Solve missing number problems, involving multiplication and division |  | 3FP4 Recognise and use fractions as numbers using unit fractions with small denominators | 3ST4 Solve one-step questions using information presented in scaled bar charts [e.g. 2,5,10 units per cm] |
|  | 3NV5 Apply partitioning related to place value using varied and increasingly complex problems [e.g. $146=100+40$ and $6,146=130+$ 16] | 3AS5 Estimate the answer to a calculation and use inverse operations to check answers | 3MD5 Write/calculate mathematical statements for multiplication and division using the multiplication tables that they know including for two-digit numbers times one-digit numbers using formal written methods [short multiplication and division] |  | 3FP5 Compare and order unit fractions. Understand unit fractions as numbers on the number line | 3ST5 Interpret and present data using tables |
|  | 3NV6 Compare and order numbers up to 1000 | 3AS6 Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | 3MD6 Solve positive integer scaling problems involving multiplication and division |  | 3FP6 Recognise, find and write fractions of a discrete set of objects using non-unit fractions with small denominators | 3ST6 Solve one-step questions using information presented in tables |
|  | 3NV7 Read and write numbers up to 1000 in numerals and in words |  | 3MD7 Write/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 methods |  | 3FP7 Recognise and use fractions as numbers using non-unit fractions with small denominators | 3ST7 Solve two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms |
|  | 3NV8 Count in ones, tens and hundreds and order numbers to 1000 |  | 3MD8 Solve correspondence problems in which n objects are connected to m objects involving multiplication and division |  | 3FP8 Compare and order fractions with the same denominators. Understand non- unit fractions as numbers on the number line | 3ST8 Solve two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in tables |
|  |  |  | 3MD9 Develop efficient mental methods to derive related facts [e.g. commutativity/associativity] |  | 3FP9 Add and subtract fractions with the same denominator within one whole [e.g. $5 / 7+1 / 7=6 / 7$ ] |  |
|  |  |  |  |  | 3FP10 Recognise and show, using diagrams, equivalent fractions with small denominators |  |


| MEASUREMENT |  |  |  |  | GEOMETRY |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEAR | LENGTH | MASS | CAPACITY/VOLUME | TIME | SHAPE | POSITION |
| $3$ | 3LG1 Measure and compare lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ) | 3MS1 Measure and compare mass (kg/g) | 3CV1 Measure and compare volume/capacity (l/ml) | 3TM1 Use vocabulary such as morning, afternoon, noon and midnight | 3SH1 Draw 2D shapes [symmetrical and nonsymmetrical polygons] |  |
|  | 3LG2 Compare and use mixed units [e.g. $5 \mathrm{~m}=500 \mathrm{~cm}$ ] including simple scaling by integers [e.g. twice as long] | 3MS2 Compare and use mixed units [e.g. 1 kg and 200 g ] including simple scaling by integers [e.g. five times heavier] | 3CV2 Compare/use mixed units [e.g. 2 litres and 20 ml ] including simple scaling by integers [e.g. 3x 250 ml containers] | 3TM2 Tell and write the time from a 12-hour analogue clock | 3SH2 Make 3D shapes using modelling materials [symmetrical and non-symmetrical polyhedral] |  |
|  | 3LG3 Add and subtract lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ) | 3MS3 Add and subtract mass (kg/g) | 3CV3 Add and subtract volume/capacity (l/ml) | 3TM3 Use vocabulary: o'clock, a.m./p.m. | 3SH3 Identify horizontal and vertical lines including length of lines |  |
|  |  |  |  | 3TM4 Tell and write the time from a 12-hour digital clock | 3SH4 Measure the perimeter of simple 2D shapes |  |
|  |  |  |  | 3TM5 Compare durations of events [e.g. to calculate the time taken by particular events or tasks] | 3SH5 Recognise angles as a property of a shape |  |
|  |  |  |  | 3TM6 Know the number of seconds in a minute and the number of days in each month, year and leap year | 3SH6 Recognise angles as a description of a turn |  |
|  |  |  |  | 3TM7 Tell and write the time from a 24-hour digital clock | 3SH7 Identify right angles |  |
|  |  |  |  | 3TM8 Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours | 3SH8 Identify whether angles are greater than or less than a right angle using accurate language [acute, obtuse] |  |
|  |  |  |  | 3TM9 Tell and write the time from a 12 -hour analogue clock using Roman numerals from I to XII | 3SH9 Identify pairs of perpendicular and parallel lines |  |
|  |  |  |  |  | 3SH10 Recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn |  |
|  |  |  |  |  | 3SH11 Compare and classify 2D geometric shapes [quadrilaterals and polygons] |  |
|  |  |  |  |  | 3SH12 Compare and classify 3D shapes [cuboids, prisms and cones] |  |

