Maths Long-Term Plan 2022-2023

Our Long-Term Maths plan for Key Stage 1 is outlined below following our overview.:

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| Year 1 Long- Term Plan |
| Autumn 1 (7) | Autumn 2 (7) | Spring 1 (6) | Spring 2 (6) | Summer 1 (6) | Summer 2 (7) |
| **Number and Place Value (7 weeks)*** count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
* count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
* given a number, identify one more and one less
* identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
* Read and write numbers from 1 to 20 20 in numerals and words.
 | **Addition & Subtraction (7 Weeks)*** read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
* represent and use number bonds and related subtraction facts within 20
* add and subtract one-digit and two-digit numbers to 20, including zero
* solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9.
 | **Multiplication & Division (3 Each)*** solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
 | **Fractions (6 Weeks)*** recognise, find and name a half as one of two equal parts of an object, shape or quantity
* recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
 | **Measurement (6 Weeks)*** compare describe and solve practical problems for:
* lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
* mass/weight [for example, heavy/light, heavier than, lighter than] capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
* time [for example, quicker, slower, earlier, later]
* measure and begin to record the following: lengths and heights mass/weight
* capacity and volume
* time (hours, minutes, seconds)
* recognise and know the value of different denominations of coins and notes
* sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
* recognise and use language relating to dates, including days of the week, weeks, months and years
* tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
 | **Shape, Space &****Geometry (7 Weeks)*** Recognise and name common 2-D and 3-D shapes, including:
* 2-D shapes [for example, rectangles (including squares), circles and triangles]
* 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

**Assessment Transition and End of Year Review.** |
| **2020 Guidance** |
| *1NPV–1 Count within 100, forwards and backwards, starting with any number.**1NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =* | *1AS–2 Read, write and interpret equations containing addition ( ), subtraction ( ) and equals ( ) symbols, and relate additive expressions and equations to real-life contexts.* | *1NF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers* |  |  | *1G–2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.**1G–1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.* |
| **Number sense** |
| ***Stage 1 – Subitising******Stage 2 – Make and Break numbers to 10**** ***Make and Break 5, 2,3,4 & 10***
 | ***Stage 2 – Make and Break numbers to 10**** ***Make and break 6 – 9***

*Assessment Point* | ***Stage 3 -*** * ***One More – One less***
* ***Two more – Two less***
* ***Number 10 Fact families***
* ***Five and a bit.***

*.* | ***Stage 3 –*** * **Five and a Bit**
* **Know about Zero**
* **Doubles and Near Doubles**
 | **Stage 3 –*** **Number Neighbours**
* **7 Tree & 9 Square**
* **Strategy Selection (3 Weeks Revision)**

*Assessment Point* | **Stage 4 –** * **Ten and bit**
* **Stage 3 & 4 Consolidation.**
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| *1NF–1 Develop fluency in addition and subtraction facts within 10.**1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.* |
|  |  | ***See detailed lesson planning via the Number sense Portal*** |

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| Year 2 Long- Term Plan |
| Autumn 1 (7) | Autumn 2 (7) | Spring 1 (6) | Spring 2 (6) | Summer 1 (6) | Summer 2 (7) |
| **Number and Place Value (6 weeks)*** count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
* recognise the place value of each digit in a two-digit number (tens, ones) identify, represent and estimate numbers using different representations, including the number line
* compare and order numbers from 0 up to 100; use and = signs
* read and write numbers to at least 100 in numerals and in words
* use place value and number facts to solve problems.
 | **Addition & Subtraction** **(3 Weeks each))*** solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods
* recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
* add and subtract numbers using concrete objects, pictorial representations, and mentally, including: two-digit number and ones

a two-digit number and tens two two-digit numbers adding three one-digit numbers* show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
* recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems
 | **Multiplication (3 Weeks)****& Division (3 Weeks)*** recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
* calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
* show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
* solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.
 | **Fractions (6 Weeks)*** recognise, find, name and write fractions 3 1 , 4 1 , 4 2 and 4 3 of a length, shape, set of objects or quantity
* write simple fractions for example, 2 1 of 6 = 3 and recognise the equivalence of 4 2 and 2 1.

**Consolidation and Review – Evidence for moderation and End of Key Stage Assessment and preparation.** | **Measures (5 Week)*** choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
* compare and order lengths, mass, volume/capacity and record the results using >, < and =
* recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
* find different combinations of coins that equal the same amounts of money
* solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
* compare and sequence intervals of time
* tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
* know the number of minutes in an hour and the number of hours in a day
 | **Geometry – properties of shape****(2 Weeks)*** Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
* identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
* identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]

compare and sort common 2-D and 3-D shapes and everyday objects**Geometry – position and direction****(3 Weeks)*** order and arrange combinations of mathematical objects in patterns and sequences
* use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).

**Statistics (2 Weeks)*** interpret and construct simple pictograms, tally charts, block diagrams and simple tables
* ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
* ask and answer questions about totalling and comparing categorical data.
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| **Guidance** |
| *2NPV–1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning**2NPV–2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.ef*2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. | *2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two digit numbers**2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two digit numbers*2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. | *2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.**2MD–2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division)*2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. | 2AS–1 Add and subtract across 10. | 2G–1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties. |
| **Number sense** |
| **Stage 1 (Review)****Subitising (2 weeks)****Stage 3 –*** **One more – one less**
* **Two more – two less**
* **Number 10 fact families**
* **Five and a bit**
* **Know about zero**
 | **Stage 3 –*** **Doubles and Near Doubles**
* **Number neighbours**
* **7 Tree & 9 square**

**Strategy Selection – Consolidation and Review.***Assessment Point* | **Stage 4 – Ten and a bit****Times Tables Practice****2, 5 and 10 Times Tables****Monday – Arithmetic****Tuesday – 2x Facts****Wednesday – 5x Facts****Thursday – 10x Facts****Friday – Tables Test** | **Stage 5 – Make Ten and then*** **Addition**
* **Subtraction**
* **Near Doubles**

**Times Tables Practice****2, 5 and 10 Times Tables****Monday – Arithmetic****Tuesday – 2x Facts****Wednesday – 5x Facts****Thursday – 10x Facts****Friday – Tables Test** | **Stage 5 – Make Ten and then*** **Near Doubles**
* **Adjusting**
* **Strategy Selection**

**Times Tables Practice****2, 5 and 10 Times Tables****Monday – Arithmetic****Tuesday – 2x Facts****Wednesday – 5x Facts****Thursday – 10x Facts****Friday – Tables Test** | **Stage 6 –*** **Calculating with multiples of ten**
* **Calculating with ones**
* **Calculating with tens**
* **Make the next ‘ten and then.**
* **Make the previous ‘ten and then’.**

**End of Year Assessment and Review.** |
|  |  | ***See detailed lesson planning via the Numbersense Portal*** |