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| **­­­­­­­­Happiness Responsibility Friendship Respect Courage** | | | | |
| **Maths – Year 3** | | | | |
| **AUTUMN TERM** | | | | |
|  | **Starter focus** | **Planning and teaching sequence** | **National Curriculum End of Year expectation** |
| **Place Value**  14 lessons | **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple pictograms (scale 1s, 2s, 5s, 10s)  **Shape** – naming 2D shapes by counting sides (circle, square, oblong, triangle, pentagon)  **Addition** – TU + U crossing boundaries (using a number line e.g., 36 + 5 is 36 + 4 to get to the next 10 then add 1)  **Fractions** – finding half using bar models | Represent numbers to 100 | To count from 0 in multiples of 4, 8, 50 and 100  To find 10 or 100 more or less than a given number  To identify, represent and estimate numbers using different representations  To read and write numbers up to 1000 in numerals and in words  To recognise the place value of each digit in a three-digit number (hundreds, tens, ones)  To compare and order numbers up to 1000  To solve number problems and practical problems involving these ideas |
| Partition numbers to 100 |
| Number line to 100 |
| Hundreds |
| **Flashback 4** – daily  **Revisit**:  **Time**: o’clock analogue and digital  **Shape** – recognising a vertical line of symmetry in simple shapes.  **Money** – Counting coins to make amounts (written as £2 and 20p – no decimals at this point)  **Number** – identifying odd and even numbers | Represent numbers to 1,000 |
| Partition numbers to 1,000 |
| Flexible partitioning of numbers to 1,000 |
| Hundreds, tens and ones |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tally charts  **Place value** - Partition numbers to 1,000  **Fractions** – finding half using bar models  **Fractions** – recognising halves, quarters and three quarters of a shape. | Find 1, 10 or 100 more or less |
| Number line to 1,000 |
| Estimate on a number line to 1,000 |
| Compare numbers to 1,000 |
| **Flashback 4** – daily  **Revisit**:  **Time**: o’clock analogue and digital  **Place value** - Find 1, 10 or 100 more or less  **Addition** – TU + U crossing boundaries (using a number line e.g., 36 + 5 is 36 + 4 to get to the next 10 then add 1)  **Money** – Counting coins to make amounts (written as £2 and 20p – no decimals at this point) | Order numbers to 1,000 |
| Count in 50s |
|  | | | |
| **Addition and Subtraction**  22 lessons |  | Apply number bonds within 10 | To add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds  To add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction  To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction |
| Add and subtract 1s |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple block graphs  **Shape** – naming 2D shapes by counting sides (circle, square, oblong, triangle, pentagon)  **Place Value** – Compare and order numbers to 1000 using < > =  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting | Add and subtract 10s |
| Add and subtract 100s |
| Spot the pattern |
| Add 1s across a 10 |
| **Flashback 4** – daily  **Revisit**:  **Time**: half past analogue and digital  **Place value** – Count in 50s  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Addition and subtraction** – using known facts to calculate multiples of 10 (6 + 2= 8 so 60 + 20 = 80) | Add 10s across a 100 |
| Subtract 1s across a10 |
| Subtract 10s across a 100 |
| Make connections |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tables  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting  **Fractions** – finding half using bar models  **Money** – Counting coins to make amounts (written as £2 and 20p – no decimals at this point) | Add two numbers (no exchange) |
| Subtract two numbers (no exchange) |
| Add two numbers (across a 10) |
| Add two numbers (across a 100) |
| **Flashback 4** – daily  **Revisit**:  **Time**: half past analogue and digital  **Addition** – TU + U crossing boundaries (using a number line e.g., 36 + 5 is 36 + 4 to get to the next 10 then add 1)  **Addition** – add 2 numbers (no exchange)  **Subtraction** – subtract 2 numbers (no exchange) | Subtract two numbers (across a 10) |
| Subtract two numbers (across a 100) |
| Add 2-digit and 3-digit numbers |
| Subtract a 2-digit number from a 3-digit number |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple pictograms (scale 1s, 2s, 5s, 10s)  **Shape** – naming 2D shapes by counting sides (circle, square, oblong, triangle, pentagon + hexagon and octagon)  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting | Compliments to 100 |
| Estimate answers |
| Inverse operations |
| Make decisions |
|  | | | |
| **Multiplication and Division A**  16 lessons | **Flashback 4** – daily  **Revisit**:  **Time**: half past analogue and digital  **Shape** – recognising a vertical line of symmetry in simple shapes.  **Addition and subtraction** – using known facts to calculate multiples of 10 (6 + 2= 8 so 60 + 20 = 80)  **Addition** - Compliments to 100 | Multiplication – equal groups | To count from 0 in multiples of 4, 8, 50 and 100  To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables  To 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 |
| Use arrays |
| Multiples of 2 |
| Multiples of 5 and 10 |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tally charts  **Place value** - Partition numbers to 1,000  **Addition** – TU + U crossing boundaries (using a number line e.g., 36 + 5 is 36 + 4 to get to the next 10 then add 1)  **Money** – Counting coins to make amounts (written as £2 and 20p – no decimals at this point) | Sharing and grouping |
| Multiply by 3 |
| Divide by 3 |
| The 3 times-table |
| **Flashback 4** – daily  **Revisit**:  **Time**: half past analogue and digital  **Place value** - Find 1, 10 or 100 more or less  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting | Multiply by 4 |
| Divide by 4 |
| The 4 times-table |
| Multiply by 8 |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple block graphs  **Shape** – naming 2D shapes by counting sides (circle, square, oblong, triangle, pentagon, hexagon, octagon and kite)  **Place Value** – Compare and order numbers to 1000 using < > =  **Addition** - Compliments to 100 | Divide by 8 |
| The 8 times-table |
| The 2, 4 and 8 times-table |
| Multiply by 4 |
| **SPRING TERM** | | | |
| **Multiplication and Division B**  11 lessons | **Flashback 4** – daily  **Revisit**:  **Time**: quarter past analogue and digital  **Place value** – Count in 50s  **Addition and subtraction** – using known facts to calculate multiples of 10 (6 + 2= 8 so 60 + 20 = 80)  **Addition** – add 2 numbers (no exchange) | Multiples of 10 | To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables  To 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  To 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 |
| Related calculations |
| Reasoning about multiplication |
| Multiply a 2-digit number by a 1-digit number – no exchange |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tables  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting  **Subtraction** – subtract 2 numbers (no exchange) | Multiply a 2-digit number by a 1-digit number – with exchange |
| Link multiplication and division |
| Divide a 2-digit number by a 1-digit number – no exchange |
| Divide a 2-digit number by a 1-digit number – flexible partitioning |
| **Flashback 4** – daily  **Revisit**:  **Time**: quarter past analogue and digital  **Addition** – TU + U crossing boundaries (using a number line e.g., 36 + 5 is 36 + 4 to get to the next 10 then add 1)  **Multiplication** - Multiply a 2-digit number by a 1-digit number – with exchange | Divide a 2-digit number by a 1-digit number – with remainders |
| Scaling |
| How many ways? |
|  | | | |
| **Length and perimeter**  8 lessons |  | Measure in metres and centimetres | To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)  To measure the perimeter of simple 2-D shapes |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple pictograms (scale 1s, 2s, 5s and 10s)  **Shape** – naming 2D shapes by counting sides (circle, square, oblong, triangle, pentagon, hexagon, octagon and kite)  **Division** – remainders  **Multiplication** - Multiply a 2-digit number by a 1-digit number – with exchange | Measure in millimetres |
| Measure in centimetres and millimetres |
| Metres, centimetres and millimetres |
| Equivalent lengths (metres and centimetres) |
| **Flashback 4** – daily  **Revisit**:  **Time**: quarter past analogue and digital  **Shape** – recognising a vertical line of symmetry in simple shapes.  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting | Equivalent lengths (centimetres and millimetres) |
| Compare lengths |
| Add lengths |
| Subtract lengths |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tally charts  **Place value** - Partition numbers to 1,000  **Addition and subtraction** – using known facts to calculate multiples of 10 (6 + 2= 8 so 60 + 20 = 80)  **Multiplication** - Multiply a 2-digit number by a 1-digit number – with exchange | What is perimeter? |
| Measure perimeter |
| Calculate perimeter |
|  | | | |
| **Fractions A**  10 lessons |  | Understand the denominators of unit fractions | To 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  To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators  To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators  To recognise and show, using diagrams, equivalent fractions with small denominators  To compare and order unit fractions, and fractions with the same denominators  To solve problems that involve all of the above |
| **Flashback 4** – daily  **Revisit**:  **Time**: quarter past analogue and digital  **Place value** - Find 1, 10 or 100 more or less  **Subtraction** – TU - U crossing boundaries (using a number line e.g., 33 - 5 is 33 - 3 to get down to the previous 10 then subtract 2)  **Perimeter** – calculate perimeter of simple shapes. | Compare and order unit fractions |
| Understand the numerators of non-unit fractions |
| Understand the whole |
| Compare and order non-unit fractions |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple block graphs  **Shape** – naming common 3D shapes (cuboid, pyramid, sphere, cube, cone)  **Place Value** – Compare and order numbers to 1000  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models | Fractions and scales |
| Fractions on a number line |
| Count in fractions on a number line |
| Equivalent fractions on a number line |
| **Flashback 4** – daily  **Revisit**:  **Time**: quarter to analogue and digital  **Place value** – Count in 50s  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting  **Perimeter** – calculate perimeter of simple shapes. | Equivalent fractions as bar models |
|  | | | |
| **Mass and Capacity**  11 lessons |  | Use scales | To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) |
| Measure mass in grams |
| Measure mass in kilograms and grams |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tables  **Addition and subtraction** – using known facts to calculate multiples of 10 (6 + 2= 8 so 60 + 20 = 80)  **Measures** – equivalent g/kg  **Time**: quarter to analogue and digital | Equivalent masses (kilograms and grams) |
| Compare mass |
| Add and subtract mass |
| Measure capacity and volume in millilitres |
| **Flashback 4** – daily  **Revisit**:  **Time**: quarter to analogue and digital  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Subtraction** – TU - U crossing boundaries (using a number line e.g., 33 - 5 is 33 - 3 to get down to the previous 10 then subtract 2)  **Perimeter** – calculate perimeter of simple shapes. | Measure capacity and volume in litres and millilitres |
| Equivalent capacities and volumes (litres and millilitres) |
| Compare capacity and volume |
| Add and subtract capacity and volume |
| **SUMMER TERM** | | | |
| **Fractions B**  6 lessons | **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple pictograms (scale 1s, 2s, 5s and 10s)  **Shape** – naming common 3D shapes (cuboid, pyramid, sphere, cube, cone)  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting  **Measures** – equivalent l/ml | Add fractions | To add and subtract fractions with the same denominator within one whole  To solve problems that involve all of the above |
| Subtract fractions |
| Partition the whole |
| Unit fractions of a set of objects |
| **Flashback 4** – daily  **Revisit**:  **Time**: quarter to analogue and digital  **Shape** – recognising a vertical line of symmetry in simple shapes.  **Measures** – equivalent m/cm  **Fractions** – add and subtract fractions with the same denominator | Non-unit fractions of a set of objects |
| Reasoning with fractions of an amount |
|  | | | |
| **Money**  6 lessons |  | Pounds and pence | To add and subtract amounts of money to give change, using both £ and p in practical contexts |
| Convert pounds and pence |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tally charts  **Place value** - Partition numbers to 1,000  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Time**: o’clock, half past, quarter past, quarter to analogue and digital | Add money |
| Subtract money |
| Find change |
| Pounds and pence |
|  | | | |
| **Time**  12 lessons | **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple black graphs  **Place value** - Find 1, 10 or 100 more or less  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting  **Fractions** - Unit fractions of a set of objects | Roman numerals to 12 | To tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.  To 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, a.m./p.m., morning, afternoon, noon and midnight.  To know the number of seconds in a minute and the number of days in each month, year and leap year  To compare durations of events [for example to calculate the time taken by particular events or tasks] |
| Tell the time to 5 minutes |
| Tell the time to the minute |
| Read time on a digital clock |
| **Flashback 4** – daily  **Revisit**:  **Time** – 5 minute intervals past  **Shape** – naming common 3D shapes (cuboid, pyramid, sphere, cube, cone)  **Place Value** – Compare and order numbers to 1000 using < > =  **Fractions** – add and subtract fractions with the same denominator | Use am and pm |
| Years, months and days |
| Days and hours |
| Hours and minutes – use start and end times |
| **Flashback 4** – daily  **Revisit**:  **Statistics** – Interpret simple tables  **Time** – 5 minute intervals past  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Fractions** - Unit fractions of a set of objects | Hours and minutes - use durations |
| Minutes and seconds |
| Units of time |
| Solve problems with time |
|  | | | |
| **Shape**  10 lessons | **Flashback 4** – daily  **Revisit**:  **Time** – 5 minute intervals to  **Addition and subtraction** – adjustment strategy +9 or -9 by adding/subtracting 10 then adjusting  **Fractions** – add and subtract fractions with the same denominator  **Roman numerals** to 12 | Turns and angles | To recognise angles as a property of shape or a description of a turn  To 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.  To identify horizontal and vertical lines and pairs of perpendicular and parallel lines  To draw 2-D shapes  To make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them. |
| Right angles |
| Compare angles |
| Measure and draw accurately |
| **Flashback 4** – daily  **Revisit**:  **Time** – 5 minute intervals to  **Shape** – naming common 3D shapes (cuboid, pyramid, sphere, cube, cone)  **Fractions** - Unit fractions of a set of objects  **Roman numerals** to 12 | Horizontal and vertical |
| Parallel and perpendicular |
| Recognise and describe 2-D shapes |
| Draw polygons |
| **Flashback 4** – daily  **Revisit**:  **Time** – 5 minute intervals past and to  **Addition and subtraction** – number bonds to 10 and 20 using part/whole models and bar models  **Roman numerals** to 12  **Shape** – right angles | Recognise and describe 3-D shapes |
| Make 3-D shapes |
|  | | | |
| **Statistics**  6 lessons |  | Interpret pictograms | To interpret and present data using bar charts, pictograms and tables.  To 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 |
| Draw pictograms |
| **Flashback 4** – daily  **Revisit**:  **Time** – 5 minute intervals past and to  **Shape** – recognising a vertical line of symmetry in simple shapes.  **Fractions** – add and subtract fractions with the same denominator  **Fractions** - Unit fractions of a set of objects | Interpret bar charts |
| Draw bar charts |
| Collect and represent data |
| Two-way table |