## Maths Progression of Skills

## OUR VISION FOR TREWIRGIE INFANTS'SCHOOL

'We care, we help, we succeed'

## OUR MISSION:

- To inspire children to engage in learning, and be valued members of a caring, supportive, and successful school.
- For all our children to develop life- long learning skills; to be independent and creative thinkers and to be socially confident.
- To enable children to be successful through a curriculum that captures their interests, stimulates their ideas, encourages inquisitiveness and critical thinking and meets their needs.

At Trewirgie Infants' \& Nursery School we believe that every child can succeed in mathematics. We understand how important
 good maths teaching is because everything a child learns while they are with us paves the way for future learning. We follow the Mastery Approach, using White Rose and the concepts taught by Karen Wilding, to support our teaching. Each unit is broken down into small steps allowing all children to gradually build and develop their understanding on previous knowledge. We use a Concrete, Pictorial and Abstract approach and allow pupils to spend enough time to fully explore a concept, reinforcing it with practice, before moving onto the next one. Maths lessons take place daily as well as further opportunities to use mathematics in the afternoons during topic work. Lessons comprise of teachers directly teaching the class followed by children practicing their maths skills by teaching and assisting each other. We work closely with the Maths Hub to support teaching our children Mastery. Mastering maths means acquiring a deep, long-term, secure and adaptable understanding of the subject. At any one point in a pupil's journey through school, achieving mastery is taken to mean acquiring a solid enough understanding of the maths that has been taught to enable him/her to move on to more advanced material


## Curriculum statement

## INTENT

(curriculum design, coverage and

## appropriateness)

The aim of the Maths curriculum is to ensure all children: - Become fluent in the fundamentals of maths through intelligent practice

- Develop their conceptual understanding and the ability to recall and apply knowledge rapidly
- To reason and problem solve by applying their
mathematics to a variety of increasingly complex problems.
- To build upon children's knowledge and understanding from Nursery through to Year 2.
- To develop independent learning behaviours through choice and challenge.
- To develop confident, articulate children.
- To develop resilience and stamina to enable all children to reason and problem solve with an increased confidence. EYFS
- To develop a deep conceptual understanding of the values and numbers to 20 , providing all children with a secure base knowledge from which mathematical mastery is built.


## IMPLEMENTATION

## (curriculum delivery, teaching and assessment)

- Opportunities for maths are planned in to our termly topics to ensure a broad and balanced curriculum is taught across all areas of maths
- Daily maths lessons include fluency, problem solving and reasoning to provide opportunities for intelligent practice and appropriate challenge for all groups of learners.
- Concrete manipulatives and pictorial representations are used to support conceptual understanding and make explicit links - Children are taught to understand the meaning and value of a value and not just the name of the number.
- Children are formerly assessed termly.
- Gaps identified within sessions are used to inform planning and sessions are provided to support the filling of gaps.
- Targeted intervention groups are carried out within KS1 EYFS
- Children are taught a lessons focusing on developing a love of maths.
- Children are assessed to check understanding of value before being taught the number symbols.
- Fluency, problem solving and reasoning are incorporated into each lesson and children are provided with the opportunities to use a range of manipulatives, discuss their learning and be subject to high quality modelling.

IMPACT
(attainment and progress)

- By the end of key stage 1 attainment the gap from the national percentages should be closing.
- The children will have a solid understanding of the mathematics
they have been taught and be able to apply it in a broad range of ways.
- They will be able to select a range of methods to solve problems and be able to explain to others their thought processes.
- The children will leave our school with a love of maths and be enthusiastic learners.
EYFS
- Children will be excited by maths and enjoy their lessons.
- Children have a deep understanding of mathematical concepts that they are using in their wider school community.


## Number and Place Value

| EYFS | YEAR 1 | YEAR 2 |
| :---: | :---: | :---: |
| - I can count reliably with numbers from 1 to 20 <br> - I can place numbers in order and say which number is one more or one less than a given number <br> - I can use quantities and objects <br> - I can count on or back to find the answer | - I can count to and across 100 , forwards and backwards, beginning with 0 or 1 , or from any given number <br> - I can count, read and write numbers to 100 in numerals; count in multiples of $2 s, 5 s$ and $10 s$ <br> - I can identify 1 more and 1 less from a given number. <br> - I can 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 <br> - I can read and write numbers from 1 to 20 in numerals and words | - I can count in steps of 2, 3, and 5 from 0 , and in 10 s from any number, forward and backward <br> - I can recognise the place value of each digit in a two-digit number (10s, 1s <br> - I can identify, represent and estimate numbers using different representations, including the number line <br> - I can compare and order numbers from 0 up to 100; use <, > and = signs <br> - I can read and write numbers to at least 100 in numerals and in words <br> - I can use place value and number facts to solve problems |
| Number - Addition and Subtraction |  |  |
| EYFS | YEAR 1 | YEAR 2 |
| - I can add and subtract two single-digit numbers | - I can read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs <br> - I can represent and use number bonds and related subtraction facts within 20 <br> - I can add and subtract one-digit and two-digit numbers to 20, including 0 <br> - I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 | - I can solve problems with addition and subtraction: <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures <br> - applying their increasing knowledge of mental and written methods <br> - I can recall and use addition and subtraction facts to 20 fluently, and derive and use related |


|  | $=?-9$ | facts up to 100 <br> - I can add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <br> - a two-digit number and 1s <br> - a two-digit number and 10 s <br> - 2 two-digit numbers <br> - adding 3 one-digit numbers <br> - I can show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot <br> - I can recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems |
| :---: | :---: | :---: |
| Number - Multiplication and Division |  |  |
| EYFS | YEAR 1 | YEAR 2 |
| - I can solve problems, including doubling, halving and sharing | - I can 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 | - I can recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers <br> - I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $x$ ), division ( $\div$ ) and equals $(=$ ) signs <br> - I can show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot |


|  |  | - I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts |
| :---: | :---: | :---: |
| Number - Fractions |  |  |
| EYFS | YEAR 1 | YEAR 2 |
| N/A | - I can recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity <br> - I can recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity | - I can recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity <br> - I can write simple fractions, for example $\frac{1}{2}$ of $6=$ 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ |
| Measurement |  |  |
| EYFS | YEAR 1 | YEAR 2 |
| - I can use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. | - I can compare, describe and solve practical problems for: <br> - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] <br> - mass/weight [for example, heavy/light, heavier than, lighter than] <br> - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] <br> - time [for example, quicker, slower, earlier, later] <br> - I can measure and begin to record the following: <br> - lengths and heights <br> - mass/weight | - I can choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); temperature $\left({ }^{\circ} \mathrm{C}\right.$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels <br> - I can compare and order lengths, mass, volume/capacity and record the results using >, < and = <br> - I can recognise and use symbols for pounds (£) and pence ( $p$ ); combine amounts to make a particular value <br> - I can find different combinations of coins that equal the same amounts of money |


|  | - capacity and volume <br> - time (hours, minutes, seconds) <br> - recognise and know the value of different denominations of coins and notes <br> - sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] <br> - I can recognise and use language relating to dates, including days of the week, weeks, months and years <br> - I can tell the time to the hour and half past the hour and draw the hands on a clock face to show these times | - I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change <br> - I can compare and sequence intervals of time <br> - I can 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 <br> - I know the number of minutes in an hour and the number of hours in a day |
| :---: | :---: | :---: |
| Geometry - Properties of Shapes |  |  |
| EYFS | YEAR 1 | YEAR 2 |
| - I can recognise, create and describe patterns. <br> - I can explore characteristics of everyday objects and shapes and use mathematical language to describe them | - I can recognise and name common 2-D and 3-D shapes, including: <br> - 2-D shapes [for example, rectangles (including squares), circles and triangles] <br> - 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] | - I can identify and describe the properties of 2D shapes, including the number of sides, and line symmetry in a vertical line <br> - I can identify and describe the properties of 3D shapes, including the number of edges, vertices and faces <br> - I can identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] <br> - I can compare and sort common 2-D and 3-D shapes and everyday objects |
| Geometry - Position and Direction |  |  |


| EYFS | YEAR 1 | YEAR 2 |
| :---: | :---: | :---: |
| N/A | - I can describe position, direction and movement, including whole, half, quarter and three-quarter turns | - I can order and arrange combinations of mathematical objects in patterns and sequences <br> - I can 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 anti-clockwise) |
| Statistic |  |  |
| EYFS | YEAR 1 | YEAR 2 |
| N/A | N/A | - I can interpret and construct simple pictograms, tally charts, block diagrams and tables <br> - I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity <br> - I can ask-and-answer questions about totalling and comparing categorical data |

## Reception

| White Rose | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Autumn | Place Value - Numbers to 5 Addition and Subtraction - Sorting Place Value - Comparing groups Measurement - Time |  |  |  |  |  |  |  |  |  |  |  |
| Spring | Addition and Subtraction - Numbers to 5 Place Value - Numbers to 10 <br> Addition and Subtraction - Addition to 10 Geometry: Shape and space |  |  |  |  |  |  |  |  |  |  |  |
| Summer | Geometry - Exploring patterns <br> Addition and Subtraction - Count on and back Place Value - Numbers to 20 <br> Multiplication and Division: Numerical patterns Measurement - Measure |  |  |  |  |  |  |  |  |  |  |  |

Year 1 - Autumn

|  | Week 1-4 (Block 1) | Week 5-8 (BLOCK 2) | Week 9 (BLOCK 3) | Week 10-11 (BLOCK 4) | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Place Value (within 10) | Number: Addition and Subtraction (within 10) | Geometry: Shape | Number: Place Value (within 20) | Consolidation |
|  | - Sort objects. <br> - Count objects. <br> - Represent objects. <br> - Count, read and write forwards from any number 0 to 10. <br> - Count, read and writing backwards from any number 0 to 10 . <br> - Count one more. <br> - Count one less. <br> - One to one correspondence to start to compare groups. <br> - Compare groups using language such as equal, more/greater, less/fewer. <br> - Introduce = , > and < symbols. <br> - Compare numbers. <br> - Order groups of objects. <br> - Order numbers. <br> - Ordinal numbers (1st, 2nd, 3rd ....). <br> - The number line. | - Part whole model. <br> - Addition symbol. <br> - Fact families - Addition facts. <br> - Find number bonds for numbers within 10. <br> - Systematic methods for number bonds within 10. <br> - Number bonds to 10. <br> - Compare number bonds. <br> - Addition: Adding together. <br> - Addition: Adding more. <br> - Finding a part. <br> - Subtraction: Taking away, how many left? Crossing out. <br> - Subtraction: Taking away, how many left? Introducing the subtraction symbol. <br> - Subtraction: Finding a part, breaking apart. <br> - Fact families - The 8 facts. <br> - Subtraction: Counting back. <br> - Subtraction: Finding the difference. <br> - Comparing addition and subtraction statements $a+b>c$. <br> - Comparing addition and subtraction statements $a+b>c$ +d. | - Recognise and name 3D shapes. <br> - Sort 3D shapes. <br> - Recognise and name 2D shapes. <br> - Sort 2D shapes. <br> - Patterns with 3D and 2D shapes. | - Count forwards and backwards and write numbers to 20 in numerals and words. <br> - Numbers from 11 to 20. <br> - Tens and ones. <br> - Count one more and one less. <br> - Compare groups of objects. <br> - Compare numbers. <br> - Order groups of objects. <br> - Order numbers | All |
|  | - Count to ten, forwards and backwards, beginning with 0 or 1 , or from any given number. <br> - Count, read and write numbers to 10 in numerals and words. <br> - Given a number, identify one more or one less. <br> - 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. | Represent and use number bonds and related subtraction facts within 10. <br> Read, write and interpret mathematical statements involving addition ( + ), subtraction (-) and equals (=) signs Add and subtract one digit numbers to 10 , including zero. Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems. | - Recognise and name common 2-D shapes, including: (e.g. rectangles (including squares), circles and triangles). <br> - Recognise and name common 3-D shapes, including: (e.g. cuboids (including cubes), pyramids and spheres). | Count to twenty, forwards and backwards, beginning with 0 or 1 , from any given number. Count, read and write numbers to 20 in numerals and words. Given a number, identify one more or one less. <br> 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. | All |
|  | Read and write numbers in numerals (to 10). | Add and subtract (one digit numbers) explaining their method verbally in pictures or using apparatus. Recall at least four of the six number bonds for 10 and reason about associated facts. | - Name some common 2D and 3D shapes from a group of shapes or from pictures of the shapes and describe some of their properties. | - Read and write numbers in numerals (to 20). <br> - Partition a two-digit number into tens and ones and demonstrate and understanding of place value, though they may use structured resources to support them. |  |
|  | Read scales in divisions (of ones). | Recall all the number bonds to and within 10. and use these to reason with. | - Name and describe properties of 2D and 3D shapes. | - Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus. | All |
|  | Read scales where not all numbers on the scale are given and estimate points in between. Solve unfamiliar word problems that involves more than one step. Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. | Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. Solve unfamiliar word problems that involves more than one step. | Describe the similarities and differences of 2 D and 3D shapes, using their properties. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involve more than one step. |  |

Highlighted areas are prioritised areas identified by DfE (June 2020).

Year 1 －Spring

|  | Week 1－4（Block 1） | Week 5－7（BLOCK 2） | Week 8－9（BLOCK 3） | Week 10－11（BLOCK 4） | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number：Addition and Subtraction | Number：Place Value（within 50） （including multiples of 2，5 and 10） | Measurement： Length and Height | Measurement： Weight and Volume | Consolidation |
|  | －Add by counting on． <br> －Find and make number bonds． <br> －Add by making 10. <br> －Subtraction－Not crossing 10. <br> －Subtraction－Crossing 10 （1）． <br> －Subtraction－Crossing 10 （2）． <br> －Related Facts．• Compare Number Sentences． | －Numbers to 50. <br> －Tens and ones． <br> －Represent numbers to 50. <br> －One more one less． <br> －Compare objects within 50. <br> －Compare numbers within 50. <br> －Order numbers within 50. <br> －Count in 2s． <br> －Count in 5 s ． | －Compare lengths and heights． <br> －Measure length（1） <br> －Measure length（2）． | －Introduce weight and mass． <br> －Measure mass． <br> －Compare mass． <br> －Introduce capacity． <br> －Measure capacity． <br> －Compare capacity． | All |
|  | －Represent and use number bonds and related subtraction facts within 20. <br> －Read，write and interpret mathematical statements involving addition（＋）， subtraction（－）and equals（＝）signs． <br> －Add and subtract one－digit and two－digit numbers to 20 ，including zero． <br> －Solve one step problems that involve addition and subtraction，using concrete objects and pictorial representations，and missing number problems such as $7=-$ 9. | －Count to 50 forwards and backwards，beginning with 0 or 1 ，or from any number． <br> －Count，read and write numbers to 50 in numerals．－ Given a number，identify one more or one less． <br> －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． <br> －Count in multiples of twos，fives and tens． | Measurement：Length and Height Measure and begin to record lengths and heights <br> －Compare，describe and solve practical problems for：lengths and heights（for example，long／short， longer／shorter，tall／short， double／half）． | Measurement：Weight and Volume Measure and begin to record mass／weight，capacity and volume． <br> Compare，describe and solve practical problems for 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］． | All |
| $\begin{gathered} \infty \\ \vdots \\ 3 \end{gathered}$ | －Add and subtract（one digit numbers） explaining their method verbally in pictures or using apparatus． <br> －Recall at least four of the six number bonds for 10 and reason about associated facts． | －Read and write numbers in numerals（to 50 ）． <br> －Partition a two－digit number into tens and ones and demonstrate and understanding of place value， though they may use structured resources to support them． | N／A | N／A |  |
|  | －Recall all the number bonds to and within 10．and use these to reason with and calculate bonds to and within 20 ， recognising other associated additive relationships． | －Read scales in divisions of ones，twos，fives． <br> －Partition two digit numbers into different combinations of tens and ones，explaining their thinking verbally，in pictures or using apparatus． | N／A | N／A | All |
| $\begin{array}{cc} \stackrel{L}{\longleftarrow} \\ \stackrel{1}{\gtrless} \\ & \\ 0 \\ 0 \\ 0 \end{array}$ | －Use reasoning about numbers and relationships to solve more complex problems and explain their thinking． <br> －Solve unfamiliar word problems that involves more than one step． | －Read scales where not all numbers on the scale are given and estimate points in between． <br> －Solve unfamiliar word problems that involves more than one step． | Use reasoning about numbers and relationships to solve more complex problems and explain their thinking． <br> －Solve unfamiliar word problems that involves more than one step． | Use reasoning about numbers and relationships to solve more complex problems and explain their thinking． <br> Solve unfamiliar word problems that involves more than one step． |  |

Highlighted areas are prioritised areas identified by DfE（June 2020）．

Year 1 - Summer

|  | Week 1 - 3 (Block 1) | Week 4 - 5 (BLOCK 2) | Week 6 (BL 3) | Week 7 - 8 (BLOCK 4) | Week 9 (BLOCK 5) | Week 10-11 (BLOCK 6) | $\begin{gathered} \hline W k \\ 12 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Multiplication and (including multiples of 2, 5 and 10) | Number: Fractions | Geometry: Position and Direction | Number: Place Value (within 100) | Measurement: Money | Measurement: Time | $\begin{gathered} \text { Consoli } \\ \text { d-ation } \end{gathered}$ |
|  | - Count in 10s. <br> Make equal groups. <br> Add equal groups. <br> - Make arrays. <br> - Make doubles. <br> - Make equal groups grouping. <br> Make equal groups - sharing. | - Halving shapes or objects. <br> - Halving a quantity. <br> - Find a quarter of a shape or object. <br> - Find a quarter of a quantity. | - Describe turns. <br> Describe Position (1). <br> Describe Position (2). | - Counting to 100. <br> - Partitioning numbers. <br> - Comparing numbers (1). <br> - Comparing numbers (2). <br> - Ordering numbers. <br> - One more, one less. | Recognising coins. Recognising notes. Counting in coins | - Before and after. <br> - Dates. <br> - Time to the hour. <br> - Time to the half hour. <br> - Writing time. <br> - Comparing time | All |
|  | Count in multiples of twos, fives and tens. 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. | 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. <br> Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half). Compare, describe and solve practical problems for: 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]. | Describe position, direction and movement, including whole, half, quarter and three quarter turns | - Count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number. <br> Count, read and write numbers to 100 in numerals. <br> - Given a number, identify one more and one less. <br> - Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than, most, least. | 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. <br> Recognise and use language relating to dates, including days of the week, weeks, months and years. <br> Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. <br> Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]. <br> - Measure and begin to record time (hours, minutes, seconds). | All |
| $\stackrel{0}{5}$ | Count in $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s from 0 and use this to solve problems. | N/A | N/A | - Read and write numbers in numerals (to 50). <br> - Partition a two-digit number into tens and ones and demonstrate and understanding of place value, though they may use structured resources to support them. | Know the value of different coins. | - Read the time on a clock |  |
|  | Recall multiplication and division facts for 2 and 10 and use them to solve simple problems, demonstrating and understanding of the commutativity as necessary. | Identify $1 / 4$ of a number or shape and know that all the parts must be equal parts of the whole. | N/A | - Read scales in divisions of ones, twos, fives. <br> - Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus | Use different coins to make the same amount. | Read the time on a clock (to half an hour) | All |
|  $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> Solve unfamiliar word problems that involves more than one step. | - Solve unfamiliar word problems that involves more than one step. Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. | - Read scales where not all numbers on the scale are given and estimate points in between. Solve unfamiliar word problems that involves more than one step. Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. | Solve unfamiliar word problems that involves more than one step. Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. | Solve unfamiliar word problems that involves more than one step. <br> Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. |  |

Highlighted areas are prioritised areas identified by DfE (June 2020).

Year 2 - Autumn

|  |  | Week 1 - 3 (Block 1) | Week 4-8 (BLOCK 2) | Week 9-10 (BLOCK 3) | Week 11-12 (BLOCK 4) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number: Place Value | Number: Addition and Subtraction | Measurement: Money | Number: Multiplication and Division |
|  |  | - Count objects to 100 and read and write numbers in numerals and words. <br> - Represent numbers to 100. <br> - Tens and ones with a part whole model. <br> - Tens and ones using addition. <br> - Use a place value chart. <br> - Compare objects. <br> - Compare numbers. <br> - Order objects and numbers. <br> - Count in $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s . <br> - Count in 3s. | - Fact families - Addition and subtraction bonds to 20. <br> - Check calculations. <br> - Compare number sentences. <br> - Related facts. <br> - Bonds to 100 (tens). <br> - Add and subtract 1 s . <br> - 10 more and 10 less. <br> - Add and subtract 10 s . <br> - Add a 2 -digit and 1-digit number - crossing ten. <br> - Subtract a 1-digit number from a 2-digit number - crossing 10. <br> - Add two 2-digit numbers - not crossing ten - add ones and add tens. <br> - Add two 2-digit numbers - crossing ten - add ones and add tens. <br> - Subtract a 2-digit number from a 2-digit number - not crossing ten. <br> - Subtract a 2-digit number from a 2-digit number - crossing ten subtract ones and tens. <br> - Bonds to 100 (tens and ones). <br> - Add three 1-digit numbers. | - Count money - pence. <br> - Count money - pounds (notes and coins). <br> - Count money - notes and coins. <br> - Select money. <br> - Make the same amount. <br> - Compare money. <br> - Find the total. <br> - Find the difference. <br> - Find change. <br> - Two-step problems. | - Recognise equal groups. - Make equal groups. - Add equal groups. - Multiplication sentences using the x symbol. - Multiplication sentences from pictures. - Use arrays. - 2 times-table. - 5 times-table. - 10 times-table. |
|  |  | - Read and write numbers to at least 100 in numerals and in words. <br> 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. <br> Compare and order numbers from 0 up to 100; use and = signs. <br> Use place value and number facts to solve problems. <br> Count in steps of 2,3 and 5 from 0 , and in tens from any number, forward and backward. | Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 . <br> Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three onedigit numbers. <br> Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. 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. <br> Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. | Recognise and use symbols for pounds ( $£$ ) and pence (p); combine amounts to make a particular value. <br> Find different combinations of coins that equal the same amounts of money. <br> - Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. | Recall and use multiplication and division facts for the 2,5 and 10 times tables, including recognising odd and even numbers. <br> Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division $(\div$ ) and equals (=) sign. <br> Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. <br> Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. |
|  | $\stackrel{\text { の }}{\stackrel{1}{3}}$ | Read and write numbers in numerals up to 100. • Partition a two-digit number into tens and ones and demonstrate and understanding of place value, though they may use structured resources to support them. | - Add and subtract (one digit numbers) explaining their method verbally in pictures or using apparatus. - Recall at least four of the six number bonds for 10 and reason about associated facts. | - Know the value of different coins. | N/A |
|  | $\left\|\begin{array}{c} \infty \\ \underset{\sim}{x} \end{array}\right\|$ | Read scales in divisions of ones, twos, fives and tens. - Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus. | Recall all the number bonds to and within 10. and use these to reason with and calculate bonds to and within 20 , recognising other associated additive relationships. | Use different coins to make the same amount. | Recall multiplication and division facts for 2,5 and 10 and use them to solve simple problems, demonstrating and understanding of commutativity as necessary. |
|  | $\begin{aligned} & \infty \\ & 0 \\ & 0 \end{aligned}$ | Read scales where not all numbers on the scale are given and estimate points in between. Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. Solve unfamiliar word problems that involves more than one step. | Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. - Solve unfamiliar word problems that involves more than one step. | Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. - Solve unfamiliar word problems that involves more than one step. | Recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts. $\cdot$ Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. - Solve unfamiliar word problems that involves more than one step. |

Highlighted areas are prioritised areas identified by DfE (June 2020).

Year 2 - Spring

|  | Week 1 - 2 (Block 1) | Week 3-4 (BLOCK 2) | Week 5-7 (BLOCK 3) | Week 8 - 10 (BLOCK <br> 4) | Week 11 (Block 5) | $\begin{aligned} & \text { Wk } \\ & 12 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number: Multiplication and Division | Statistics | Geometry: Properties of Shape | Number: Fractions | Measurement: Length and Height | $\underset{\substack{\text { Consol- } \\ \text { Idation }}}{\text { (2) }}$ |
|  | - Make equal groups - sharing. <br> - Make equal groups - grouping. <br> - Divide by 2. <br> - Odd and even numbers. <br> - Divide by 5 . <br> - Divide by 10. | - Make tally charts. <br> - Draw pictograms (1-1). <br> - Interpret pictograms (1-1). <br> - Draw pictograms (2, 5 and 10). <br> - Interpret pictograms (2,5 and 10). <br> - Block diagrams. | - Recognise 2D and 3D shapes. <br> - Count sides on 2D shapes. <br> - Count vertices on 2D shapes. <br> - Draw 2D shapes. <br> - Lines of symmetry. <br> - Sort 2D shapes. <br> - Make patterns with 2D shapes. <br> - Count faces on 3D shapes. <br> - Count edges on 3D shapes. <br> - Count vertices on 3D shapes. <br> - Sort 3D shapes. <br> - Make patterns with 3D shapes. | - Make equal parts. <br> - Recognise half. <br> - Find half. <br> - Recognise quarter. <br> - Find a quarter. <br> - Recognise a third. <br> - Find a third. <br> - Unit fractions. <br> - Non 0 unit fractions. <br> - Equivalence of $1 / 2$ and $2 / 4$ <br> - Find three quarters. <br> - Count in fractions. | - Measure length (cm). <br> - Measure length (m). <br> - Compare lengths. <br> - Order lengths. <br> - Four operations with lengths. | All |
|  | - Recall and use multiplication and division facts for the 2,5 and 10 times tables, including recognising odd and even numbers. <br> - Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs. <br> - Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. <br> Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. | - Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. <br> - Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. <br> - Ask and answer questions about totalling and comparing categorical data. | - Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. <br> - Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. <br> - Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. <br> - Compare and sort common 2-D and 3-D shapes and everyday objects. | - Recognise, find, name and write fractions $1 / 3$, $1 / 4,2 / 4$ and $3 / 4$ of a length, shape and set of objects or quantity. <br> - Write simple fractions for example, $1 / 2$ of $6=3$ and recognise the equivalence of $2 / 4$ and 1/2. | - Choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass (kg/g); temperature ( ${ }^{\circ} \mathrm{C}$ ); capacity (litres $/ \mathrm{ml}$ ) 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 $=$. | All |
|  | N/A | N/A | - Know the value of different coins. | N/A | N/A | All |
|  | - Recall multiplication and division facts for 2,5 and 10 and use them to solve simple problems, demonstrating and understanding of commutativity as necessary. | - Read scales in divisions of ones, twos, fives and tens. | - Name and describe properties of 2D and 3D shapes, including number of sides, vertices, edges, faces and lines of symmetry. | Identify $1 / 4,1 / 3,1 / 2,2 / 4$, $3 / 4$ of a number or shape and know that all the parts must be equal parts of the whole. | N/A | All |
|  | - Recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts. <br> Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. Solve unfamiliar word problems that involves more than one step. | - Read scales where not all numbers on the scale are given and estimate points in between. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Describe the similarities and differences of 2D and 3D shapes, using their properties. <br> - Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | All |

Highlighted areas are prioritised areas identified by DfE (June 2020).
Year 2 - Summer

|  | Week 1 - 3 (Block 1) | Week 4-5 (BLOCK 2) | Week 6-7 (BLOCK 3) | Week 8-10 (BLOCK 4) | Week 11-12 (BLOCK 5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Geometry: Position and Direction | Problem solving and efficient methods | Measurement: Time | Measurement: Mass, Capacity and Temperature | Investigations |
|  | - Describing movement. <br> - Describing turns. <br> - Describing movement and turns. <br> - Making patterns with shapes. | All | - O'clock and half past. <br> - Quarter past and quarter to. <br> - Telling time to 5 minutes. <br> - Minutes in an hour, hours in a day. <br> - Find durations of time. <br> - Compare durations of time. | - Compare mass. <br> - Measure mass in grams. <br> - Measure mass in kilograms. <br> - Compare capacity. <br> - Millilitres. <br> - Litres. <br> - Temperature. | All |
|  | - 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). <br> - Order and arrange combinations of mathematical objects in patterns and sequences. | All | - 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. <br> - Know the number of minutes in an hour and the number of hours in a day. <br> - Compare and sequence intervals of time. | Choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); temperature ( ${ }^{\circ} \mathrm{C}$ ); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. <br> Compare and order lengths, mass, volume/capacity and record the results using >, < and $=$. | All |
| $\stackrel{0}{5}$ | N/A | All | - Read the time on a clock | N/A |  |
| sұuәшәџels $\exists \forall \perp$ | N/A | All | - Read the time on a clock to the nearest 15 minutes. | N/A |  |
|  | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | All | - Read the time on a clock to the nearest 5 minutes. <br> Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. Solve unfamiliar word problems that involves more than one step. | All |

[^0]DfE KS1 Priority Areas (June 2020)

|  | Year 1 | Year 2 |
| :---: | :---: | :---: |
| Number and place value | - Count within 100, forwards and backwards, starting with any number. <br> - Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = | - Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning. <br> Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10 . |
| Number facts | - Develop fluency in addition and subtraction facts within 10. <br> - 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. | - Secure fluency in addition and subtraction facts within 10 , through continued practice. |
| Addition and subtraction | - Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. <br> - Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts. | - Add and subtract across 10. <br> - Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?". <br> - Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. <br> - Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 twodigit numbers. |
| Multiplication and division |  | - Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2,5 and 10 multiplication tables. <br> Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division). |
| Geometry | - 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. <br> - Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations. | - Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties. |

## References:

National curriculum in England: mathematics programmes of study (June 2020)
Mathematics guidance: key stages 1 and 2 Non-statutory guidance for the national curriculum in England - Introduction (June 2020)
Mathematics guidance: key stages 1 and 2 Non-statutory guidance for the national curriculum in England - Year 1 (June 2020)
Mathematics guidance: key stages 1 and 2 Non-statutory guidance for the national curriculum in England - Year 2 (June 2020)


[^0]:    Highlighted areas are prioritised areas identified by DfE (June 2020).

