

Church Lane Primary School  
 and Nursery

Mathematics Curriculum

2020/2021

Year 1

Year 1 – Mathematics curriculum

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| Subject area | Concept | Milestone | Equipment | Key Vocab |
| Place Value | Numbers to 10 | Sorting objects | Tens frame  Number line  Multilink cubes  Counters  Real-life objects (toy cars)  Pens and Pencils | Sort, group pattern  Digits, numbers  Count on, count back, one more, one less, one more than, one less than  Matched, equal to, =  Fewer, less than, <, least, fewest  More, greater than, >, most, greatest  Number line, number track, tens frame |
| Counting objects in 10 |
| Counting and writing numbers to 10 |
| Counting backwards from 10 to 0 |
| Counting one more |
| Counting one less |
| Comparing groups |
| Comparing numbers of objects |
| Comparing numbers |
| Ordering objects and numbers |
| First, second and third… |
| The number line |
|  |  |  |  |  |
| Place value | Part-whole within 10 | The part-whole model (1) | Part-whole model  Counters  Hoops  Teddy bears  Countable objects | Part-whole model, part, whole, groups  Number sentence, number bonds,  Plus  Equal to  More than, less than |
| The part-whole model (2) |
| Related facts – number bonds |
| Finding number bonds |
| Comparing number bonds |
|  |  |  |  |  |
| Addition and Subtraction | Addition and Subtraction within 10 (1) | Finding the whole – adding together | Blank part-whole model  Blank ten frames  Cubes  Counters  Any physical resources to make parts of a whole (cubes, counters, teddies, csrs) | Part, whole, part-whole  Altogether, in total, total, sum  Add, added, plus, +  Count, count on  Missing, missing part  Number bonds, number pairs  Number stories |
| Finding the whole – adding more |
| Finding a part |
| Finding and making number bonds |
| Finding addition facts |
| Solving word problems - addition |
|  |  |  |  |  |
| Addition and Subtraction | Addition and Subtraction within 10 (2) | Subtraction – how many are left? (1) | Cubes  Counters  Balloons  Pictures of balloons | How many are left?  Take away, taken away, subtract  Subtraction, addition  Count back, count backwards  Difference  How many more? How many fewer?  More than, >, less than, <  Missing part  Number stories |
| Subtraction – how many are left (2) |
| Subtraction – breaking apart (1) |
| Subtraction – breaking apart (2) |
| Related facts – addition and subtraction (1) |
| Related facts – addition and subtraction (2) |
| Subtraction – counting back |
| Subtraction – finding the difference |
| Solving word problems – subtraction |
| Comparing additions and subtractions (1) |
| Comparing additions and subtractions (2) |
| Solving word problems – addition and subtractions |
|  |  |  |  |  |
| Shape | 2D and 3D shapes | Naming 3D shapes (1) | 3D shapes (cube, cuboid, sphere, cylinder and pyramid)  Modelling material to make 3D shapes  Sorting hoops  Opaque bag  Everyday items relating to 3D shapes | 2D, 3D  Cube, cuboid, sphere, cylinder, pyramid, cone  Circle, triangle, square, rectangle  Side, edge, face, corner  Pattern, repeat |
| Naming 3D shapes (2) |
| Naming 2D shapes (1) |
| Naming 2D shapes (2) |
| Making patterns with shapes |
|  |  |  |  |  |
| Place Value | Numbers to 20 | Counting and writing numbers to 20 | Tens frame  Number line  Cubes  Counters  Stopwatch  Selection of objects for counting (toy cars, shapes, blocks, pencils) | Numbers 11-20  Count, backwards, forwards  Tens, ones  More, less  Greatest, smallest, fewer, fewest, most, least  Order, compare  Equal to, more than, less than |
| Tens and ones (1) |
| Tens and ones (2) |
| Counting one more, one less |
| Comparing numbers of objects |
| Comparing numbers |
| Ordering objects and numbers |
|  |  |  |  |  |
| Addition and subtraction | Addition within 20 | Add by counting on | Counters  Cubes  Tens frames  Number tracks | Count, count on  Add, addition, additions, plus,+  Number bond  Tens, ones  Number stories, represent  Part, whole, part-whole  Greater, less, how many more?  predict |
| Adding ones |
| Finding number bonds |
| Add by making 10 (1) |
| Add by making 10 (2) |
| Solving word problems - addition |
|  |  |  |  |  |
| Addition and subtraction | Subtraction within 20 | Subtracting ones | Counters  Number lines  Ten frames  Bead strings  Number tracks | Subtract  Find the difference  How many are left?  Take away  Tens, ones  Number bonds  Part-whole  Addition  Count back  Fact family |
| Subtracting tens and ones |
| Subtraction – crossing the 10 (1) |
| Subtraction – crossing the 10 (2) |
| Solving word and picture problems – subtraction |
| Addition and subtraction facts to 20 |
| Comparing additions and subtractions |
| Solving word and picture problems – addition and subtraction |
|  |  |  |  |  |
| Place Value | Numbers to 50 | Counting to 50 (1) | Base 10 equipment  Place value cards  Number lines marked in 1s  100 squares  Digit cards | Tens, ones  Compare, order  Less than, <, greater than, >  Number names and numerals to 50 |
| Numbers to 50 (2) |
| Tens and ones |
| Representing numbers to 50 |
| Comparing numbers of objects |
| Comparing numbers |
| Comparing objects and numbers |
| Counting in 2s |
| Counting in 5s |
| Solving word problems – addition and subtraction (1) |
| Solving word problems – addition and subtraction (2) |
|  |  |  |  |  |
| Measure | Introducing length and height | Comparing lengths and heights | A variety of classroom objects to compare height and lengths  Three skipping ropes of different lengths | Long, longer, longest  Short, shorter, shortest  Tall, taller, tallest  Length, height  Compare, comparison  Measure  Distance  Unit, non-standard unit  Ruler  Centimetre  Total  difference |
| Non-standard units of measure (1) |
| Non-standard units of measure (2) |
| Measuring length using a ruler |
| Solving word problems - length |
|  |  |  |  |  |
| Measure | Introducing weight and volume | Comparing weights | Balancing scales  Scales  Objects to weigh (teddy bears, soft toys, toy cars/lorries) | Weight, weigh  Capacity, volume, contains, container  Heavier, heaviest, lighter, lightest  More, most, fewer, less, least  >,<,=  Addition, subtraction  Balance scales, balanced  Compare, measure, estimate  Empty, full, amount, half |
| Measuring weight |
| Comparing weight using measuring |
| Comparing capacity |
| Measuring capacity |
| Comparing capacity using measuring |
| Solving word problems – weight and capacity |
|  |  |  |  |  |
| Multiplication and division | Multiplying | Counting in 10s, 5s and 2s | Ten frames  Number line  100 square  Countable objects | Equal groups  Array  Row, column  Double, twice  Add, addition, adding, altogether, total |
| Making equal groups |
| Adding equal groups |
| Making simple arrays |
| Making doubles |
| Solving word problems - multiplication |
|  |  |  |  |  |
| Multiplication and division | Dividing | Making equal groups (1) | Counters or other countable objects (toy people, toy animals or pictures of these)  Interlocking cubes  Printed rectangles  Printed circles to represent groups  Paper clips | Equal groups, same, different  Share, sharing equally  Fairly  Total, altogether, each  Division |
| Making equal groups (2) |
| Sharing equally (1) |
| Sharing equally (2) |
| Solving word problems - division |
|  |  |  |  |  |
| Fractions | Halves and quarters | Finding halves (1) | Shapes  Mirrors | Half, halves, quarter  Equal  Share, split  Part, whole |
| Finding halves (2) |
| Finding quarters (1) |
| Finding quarters (2) |
| Solving word problems – halves and quarters |
|  |  |  |  |  |
|  |  |  |  |  |
| Shape | Position and direction | Describing turns | Paper circles  Colouring pencils  Objects to rotate | Turn, position, direction  Half turn, quarter turn, three-quarter turn, whole turn  Left, right, in between  Forwards, backwards  Above, below  Top, middle, bottom  Up, down |
| Describing positions (1) |
| Describing positions (2) |
|  |  |  |  |  |
| Place Value | Numbers to 100 | Counting to 100 | Counters  Large printed ten frames  Countable objects such as buttons | 100 square, number square  Place value grid  Pattern, same, different  Less than, fewer, smaller, less  Greater than, larger, bigger, more  Equal to  Greatest, biggest  Fewest, smallest  Tens, ones, place value, partition  How many?, count  Number bonds |
| Exploring number patterns |
| Partitioning numbers (1) |
| Partitioning numbers (2) |
| Comparing numbers (1) |
| Comparing numbers (2) |
| Ordering numbers |
| Bonds to 100 (1) |
| Bonds to 100 (2) |
|  |  |  |  |  |
| Measure | Time | Using before and after | Cards to represent events (pictorially) | Before, after  Faster, slower, shorter, longer, earlier, later  Yesterday, today, tomorrow  Day, week, month, year  Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday  Calendar, date  Minute hand, hour hands, second hand  O’clock, half past  Second, minute, hour |
| Using a calendar |
| Telling time to the hour |
| Telling tine to the half hour |
| Writing time |
| Comparing time |
| Solving word problems - time |
|  |  |  |  |  |
| Measure | Money | Recognising coins | Coins (with numbers not just words) | Pound, penny, pennies, pence  Coins, notes, banknotes  £,p  Greater than, less than, equal to, total, altogether  <, >, =, greater than, less than  Value, worth |
| Recognising notes |
| Counting with coins |

At the end of each **unit**, please allow ALL pupil to independently complete the end of unit assessment. This can be found on your PowerMaths online account.

* Click on your unit (left hand side)
* Scroll down to the bottom of the screen to find ‘assess’ menu.
* Print off end of unit test and stick it in their book.

At the end of each **term** (Autumn, Spring, Summer), please complete the end of term assessments from White Rose Maths. These can be find using the web address: <https://whiterosemaths.com/resources/assessment/primary-assessment/end-of-term-primary/>

Displays should be a ‘working wall’ including **up-to-date** information and pupil work. It should also include questions and challenges. It **must** show the **progressive journey** your class have been on throughout that unit.

All classrooms should follow the colour co-ordinated questions:

Orange – fluency (no worded response necessarily required, although KS2 should request pupils to answer using Stem sentences E.G 2 + 2 = The total of 2 plus 2 is 4)

Blue – reasoning – there should be a written worded response which is grammatically coherent with correct punctuation.

Green – problem solving – the children should show their workings (journey). We should be looking for and encouraging systematic approaches, using all prior knowledge not ‘trial and error’

**Next steps** should take learning to the next level. For example: a child has only completed fluency questions, their next step could be a reasoning or a pupil that has only completed fluency supported, then a fluency independently is a good next step.  
  
**Immediate interventions or pre-**learning should take place regularly with **ALL** pupils.