

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 frameNumber lineMultilink cubesCountersReal-life objects (toy cars)Pens and Pencils | Sort, group patternDigits, numbersCount on, count back, one more, one less, one more than, one less thanMatched, equal to, =Fewer, less than, <, least, fewestMore, greater than, >, most, greatestNumber 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 modelCountersHoopsTeddy bearsCountable objects | Part-whole model, part, whole, groupsNumber sentence, number bonds,PlusEqual toMore 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 modelBlank ten framesCubesCountersAny physical resources to make parts of a whole (cubes, counters, teddies, csrs) | Part, whole, part-wholeAltogether, in total, total, sumAdd, added, plus, +Count, count onMissing, missing partNumber bonds, number pairsNumber 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) | CubesCountersBalloonsPictures of balloons  | How many are left?Take away, taken away, subtractSubtraction, additionCount back, count backwardsDifferenceHow many more? How many fewer?More than, >, less than, <Missing partNumber 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 shapesSorting hoopsOpaque bagEveryday items relating to 3D shapes | 2D, 3DCube, cuboid, sphere, cylinder, pyramid, coneCircle, triangle, square, rectangleSide, edge, face, cornerPattern, 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 frameNumber lineCubesCountersStopwatchSelection of objects for counting (toy cars, shapes, blocks, pencils) | Numbers 11-20Count, backwards, forwardsTens, onesMore, lessGreatest, smallest, fewer, fewest, most, leastOrder, compareEqual 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 | CountersCubesTens framesNumber tracks | Count, count onAdd, addition, additions, plus,+Number bondTens, onesNumber stories, representPart, whole, part-wholeGreater, 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 | CountersNumber linesTen framesBead stringsNumber tracks | SubtractFind the differenceHow many are left?Take awayTens, onesNumber bondsPart-wholeAdditionCount backFact 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 equipmentPlace value cardsNumber lines marked in 1s100 squaresDigit cards | Tens, onesCompare, orderLess 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 lengthsThree skipping ropes of different lengths | Long, longer, longestShort, shorter, shortestTall, taller, tallestLength, heightCompare, comparisonMeasureDistanceUnit, non-standard unitRulerCentimetreTotaldifference |
| 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 scalesScalesObjects to weigh (teddy bears, soft toys, toy cars/lorries) | Weight, weighCapacity, volume, contains, containerHeavier, heaviest, lighter, lightestMore, most, fewer, less, least>,<,=Addition, subtractionBalance scales, balancedCompare, measure, estimateEmpty, 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 framesNumber line100 squareCountable objects | Equal groupsArrayRow, columnDouble, twiceAdd, 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 cubesPrinted rectanglesPrinted circles to represent groupsPaper clips | Equal groups, same, differentShare, sharing equallyFairlyTotal, altogether, eachDivision |
|  Making equal groups (2) |
| Sharing equally (1) |
| Sharing equally (2) |
| Solving word problems - division |
|  |  |  |  |  |
| Fractions | Halves and quarters | Finding halves (1) | ShapesMirrors | Half, halves, quarterEqualShare, splitPart, whole |
| Finding halves (2) |
| Finding quarters (1) |
| Finding quarters (2) |
| Solving word problems – halves and quarters |
|  |  |  |  |  |
|  |  |  |  |  |
| Shape | Position and direction | Describing turns | Paper circlesColouring pencilsObjects to rotate | Turn, position, directionHalf turn, quarter turn, three-quarter turn, whole turnLeft, right, in betweenForwards, backwardsAbove, belowTop, middle, bottomUp, down |
| Describing positions (1) |
| Describing positions (2) |
|  |  |  |  |  |
| Place Value | Numbers to 100 | Counting to 100 | CountersLarge printed ten framesCountable objects such as buttons | 100 square, number squarePlace value gridPattern, same, differentLess than, fewer, smaller, lessGreater than, larger, bigger, moreEqual toGreatest, biggestFewest, smallestTens, ones, place value, partitionHow many?, countNumber 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, afterFaster, slower, shorter, longer, earlier, laterYesterday, today, tomorrowDay, week, month, yearMonday, Tuesday, Wednesday, Thursday, Friday, Saturday, SundayCalendar, dateMinute hand, hour hands, second handO’clock, half pastSecond, 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, penceCoins, notes, banknotes£,pGreater than, less than, equal to, total, altogether<, >, =, greater than, less thanValue, 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.