



Year 3 Curriculum Map – Maths Number and Calculation

Ready to
Progress
Criteria



St Christopher Primary

During key stage 2 pupils use the number system more confidently. They move from counting reliably to calculating fluently with all four number operations. They always try to tackle a problem with mental methods before using any other approach. Pupils explore features of shape and space and develop their measuring skills in a range of contexts. They discuss and present their methods and reasoning using a wider range of mathematical language, diagrams and charts.

| Half Term 1 Numbers to 200 Calculation – Addition and Subtraction Multiplication and Division | Half Term 2 Number to 500 Calculation – Addition and Subtraction Multiplication and Division Fractions | Half Term 3 Number to 500 Calculation – Addition and Subtraction Multiplication and Division Fractions | Half Term 4 Numbers to 500 Calculation – Addition and Subtraction Multiplication and Division Fractions | Half Term 5 Numbers to 1000 Calculation – Addition and Subtraction Multiplication and Division Fractions | Half Term 6 Numbers to 1000 Calculation – Addition and Subtraction Fractions |
|--|--|--|--|---|---|
| Concrete and Pictorial | | | | | |
| Identify, represent and estimate numbers (0-200) using concrete objects, pictorial representation and a number line/hundred square. | Identify, represent and estimate (0-500) using concrete objects, pictorial representation and a number line/hundred square. | Identify, represent and estimate (0-500) using concrete objects, pictorial representation and a number line/hundred square. | Identify, represent and estimate numbers (0-500) using concrete objects, pictorial representation and a number line/hundred square. | Identify, represent and estimate numbers (0-1000) using concrete objects, pictorial representation and a number line/hundred square. | Identify, represent and estimate (0-1000) using concrete objects, pictorial representation and a number line/hundred square. |
| Number and place value | | | | | |
| Read and write numbers from (0-200) in digits and words. | Read and write numbers from (0-500) in digits and words. | Read and write numbers from (0-500) in digits and words. | Read and write numbers from (0-500) in digits and words. | Read and write numbers from (0-1000) in digits and words. | Read and write numbers from (0-1000) in digits and words. |
| Compare and order numbers from (0-200). Use < > = signs. | Compare and order numbers from (0-500) Use < > = signs. | Compare and order numbers from (0-500) Use < > = signs. | Compare and order numbers from (0-500) Use < > = signs. | 3NPV-3 Compare and order numbers from (0-1000) Use < > = signs. | Compare and order numbers from (0-1000) Use < > = signs. |
| Recognise place value of each digit in a three-digit number (hundreds, tens and ones). 3NPV-1 Know that 10 tens are equivalent to 1 hundred and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three digit multiples of 10. | Recognise place value of each digit in a three-digit number (hundreds, tens and ones). | Recognise place value of each digit in a three-digit number (hundreds, tens and ones). 3NPV-4 Divide 100 into 2, 4, 5, and 10 equal parts and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. | 3NPV-2 Recognise place value of each digit in a three-digit number (hundreds, tens and ones). | Round numbers up to 1000 to the nearest 10. | Round numbers up to 1000 to the nearest 10. |
| Count, read and write numbers including money | | | | | |
| Count coins (1p, 2p, 5p, 10p, 20p and 50p). | Finding 10 more or less than a given number. Count in steps of ones, twos, threes, fives and tens from 0 – 200 forwards and backwards. | 3NPV-3 Finding 10 more or less than a given number. | Finding 100 more or less than a given number. Count in steps of ones, twos, threes, fours, fives, eights and tens from 0 – 500 forwards and backwards. | 3NPV-3 Finding 100 more or less than a given number. | Count up and down in tenths. Count in steps of fifty from 0 – 1000 forwards and backwards. |
| Addition and Subtraction - Solve problems including missing number problems, using number facts, place value and more complex addition and subtraction. | | | | | |
| 3AS-1 3NF-1 Recall and use addition and subtraction facts to 100 fluently. 3NF-3 Derive and use related facts to 200. | Recall and use addition and subtraction facts to 500 fluently. Derive and use related facts to 500. | Add and subtract three digit number and hundreds mentally. | Add and subtract three digit number and tens mentally. | Add and subtract three digit number and ones mentally. | Add and subtract three digit number and hundreds, tens or ones mentally. |
| Add and subtract numbers using concrete objects, pictorial representations mentally and using written methods, including: A two-digit number and ones A two-digit number and tens Two two-digit numbers Adding three one-digit numbers. | Add and subtract numbers using column addition and subtraction, including: Two two-digit numbers A two-digit number and ones A two-digit number and tens. | Estimate the answer to a calculation and use inverse operation to check answers. Add and subtract numbers using column addition and subtraction, including: Two two-digit numbers A two-digit number and ones A two-digit number and tens. | Estimate the answer to a calculation and use inverse operation to check answers. Add and subtract numbers using column addition and subtraction, including: Two two-digit numbers A two-digit number and ones A two-digit number and tens. | Estimate the answer to a calculation and use inverse operation to check answers. 3AS-2 Add and subtract numbers using column addition and subtraction, including: A two-digit number and a three-digit number Two three-digit numbers. | 3AS-3 Estimate the answer to a calculation and use inverse operation to check answers. Add and subtract numbers using column addition and subtraction, including: A two-digit number and a three-digit number Two three-digit numbers. |
| Multiplication and Division - Solve problems including missing number problems involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. | | | | | |
| Calculate mathematical statements for multiplication and division using the multiplication tables that they know; including a range of concrete and mental methods. | Calculate mathematical statements for multiplication and division for two digit numbers times one digit numbers using a range of concrete and mental methods. | Calculate mathematical statements for multiplication and division for two digit numbers times one digit numbers using a range of concrete and mental methods. | Calculate mathematical statements for multiplication and division for two digit numbers times one digit numbers using a range of concrete resources, mental and written methods. | 3MD-1 Calculate mathematical statements for multiplication and division for two digit numbers times one digit numbers using a range of concrete resources, mental and written methods. | |
| Recall and use multiplication and division facts for the 2, 3, 5, 10x table. Recognise odd and even numbers including those with three digits. | Recall and use multiplication and division facts for the 2, 3, 4, 5, 10x table. Recognise odd and even numbers including those with three digits. | 3NF-2 Recall and use multiplication and division facts for the 2, 3, 4, 5, 8, 10x table. Identify multiples. | | | |
| Recognise and use the inverse relationship between multiplication and division in calculations. | Recognise and use the inverse relationship between multiplication and division in calculations. | Recognise and use the inverse relationship between multiplication and division in calculations. | | | |
| Fractions including problem solving with all of the below. | | | | | |
| | 3F-1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. | Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. | Recognise and show using diagrams and equivalent fractions with small denominators. | Count up and down in tenths. | 3F-4 Add and subtract with the same denominator within one whole e.g.: 5/7 + 1/7=6/7. |

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| | Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. | Compare and order unit fractions with the same denominator. | 3F-3 Reason about the location of any fraction within 1 in the linear number system | | |
| | Compare and order unit fractions with the same denominator. | 3F-2 Find unit fractions of quantities using known division facts | | Recognise find and write fractions of a discrete set of objects e.g.: $\frac{1}{4}$ of 32 unit fractions and non-unit fractions with small denominators. | |



Year 3 Curriculum Map – Maths Geometry, Measurement and Statistics



| Half Term 1 Numbers to 200 Money Geometry/Shape | Half Term 2 Number to 250 Money Geometry | Half Term 3 Number to 500 Measurement Geometry | Half Term 4 Numbers to 500 Perimeter Time | Half Term 5 Numbers to 1000 Capacity Time Statistics | Half Term 6 Numbers to and beyond 1000 Mass Geometry/Angles Statistics |
|--|---|--|---|---|---|
| Measurement - Money | | | | | |
| Add and subtract amounts of money to give change, using both £ and p in practical contexts. | Solve simple problems in a practical context involving addition and subtraction of money using pounds and pence including giving change. | | | | |
| | | Measurement – Units of Measure | | | |
| | | Choose and use appropriate standard units to estimate and measure add, subtract and compare length/height in any direction (m/cm) using rulers, tape measures, metre sticks. | Measure the perimeter of simple 2d shapes. | Choose and use appropriate standard units to estimate and measure add, subtract and compare temperature (°C) and capacity (l/ml) to the nearest appropriate unit using scales and thermometers. | Choose and use appropriate standard units to estimate and measure add, subtract and compare mass (g/kg) to the nearest appropriate unit using a range of measuring vessels. |
| | | | Measurement – Time | | |
| | | | Estimate and read time with increasing accuracy to the nearest minute and record and compare time in seconds, minutes and hours. Vocabulary: seconds, minutes, hours, o'clock, am/pm, morning afternoon, noon and midnight. | Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. | |
| | | | Know the number of seconds in a minute and the number of days in months, year and leap year. | Compare duration of events. | |
| Geometry - Shape, Position and Direction | | | | | |
| Identify and name regular and irregular polygons (as year 1 and 2 as well as pentagons, hexagons, octagons, nonagons, decagons). | 3G-2 Identify horizontal and vertical lines and pairs of perpendicular and parallel lines in 2d shapes. Draw polygons by joining marked points. 3G-1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. | Describe positions on a simple co-ordinates grid in one quadrant. | | | Recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn. |
| Identify and name of 3D shapes (cones cylinders, prisms, pyramids, cubes, cuboids, spheres). | Compare and sort 2-D and 3-D shapes. | | | | |
| Identify and describe the properties of a range of 3-D shapes, including the number of edges, vertices and faces. | Draw 2-D Shapes and make 3-D Shapes using modelling materials; recognise 3d shapes in different orientations and describe them. | | | | Identify whether angles are greater than or less than a right angle. |
| | | | | Statistics | |
| | | | | Interpret and present data using bar charts, pictograms and tables. | Solve one step and two step questions such as How many more? How many less? Using information presented in scaled tables and bar charts. |

