# Fairfield Road Primary School

## Year 4 Maths Long Term Plan

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
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| AUTUMN | **Number and Place Value**<br>Place Value | | | | **Addition and subtraction**<br>Addition and Subtraction | | | | HALF TERM | **Addition and subtraction**<br>Addition and Subtraction | **Multiplication and Division**<br>Multiplication and Division A | | | | | CHRISTMAS |
| | 1 | 2 | 3 | 4 | 5 | 6 | | 7 | 8 | 9 | 10 | 11 | | | | |
| SPRING | **Multiplication and Division**<br>Multiplication and Division B | | | **Measurement**<br>Length, perimeter and area | | | HALF TERM | **FDP**<br>Fractions | | | | **FDP**<br>Decimals A | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | 13 | | |
| SUMMER | **FDP**<br>Decimals A and B | | | **Measure-ment**<br>Money | **Geometry – Properties of Shape**<br>Shape | | | HALF TERM | **Geometry – Properties of Shape**<br>Shape | **Statistics**<br>Statistics | | **Geometry – Position and Direction**<br>Position and Direction | **Measurement**<br>Time | | | |

| Mathematics strand | WRM unit | Small Steps | NC objectives |
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| Number and Place Value | Place Value | • Step 1 Represent numbers to 1,000<br>• Step 2 Partition numbers to 1,000<br>• Step 3 Number line to 1,000<br>• Step 4 Thousands<br>• Step 5 Represent numbers to 10,000<br>• Step 6 Partition numbers to 10,000<br>• Step 7 Flexible partitioning of numbers to 10,000<br>• Step 8 Find 1, 10, 100, 1,000 more or less<br>• Step 9 Number line to 10,000<br>• Step 10 Estimate on a number line to 10,000<br>• Step 11 Compare numbers to 10,000<br>• Step 12 Order numbers to 10,000<br>• Step 13 Roman numerals<br>• Step 14 Round to the nearest 10<br>• Step 15 Round to the nearest 100<br>• Step 16 Round to the nearest 1,000<br>• Step 17 Round to the nearest 10, 100 or 1,000 | • Identify, represent and estimate numbers using different representations<br>• Count in multiples of 6, 7, 9, 25 and 1,000 KEY<br>• Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones)<br>• Find 1,000 more or less than a given number<br>• Order and compare numbers beyond 1,000 KEY<br>• Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value<br>• Round any number to the nearest 10, 100 or 1,000 KEY |
| Addition and Subtraction | Addition and Subtraction | • Step 1 Add and subtract 1s, 10s, 100s and 1,000s<br>• Step 2 Add up to two 4-digit numbers – no exchange<br>• Step 3 Add two 4-digit numbers – one exchange<br>• Step 4 Add two 4-digit numbers – more than one exchange<br>• Step 5 Subtract two 4-digit numbers – no exchange<br>• Step 6 Subtract two 4-digit numbers – one exchange<br>• Step 7 Subtract two 4-digit numbers – more than one exchange<br>• Step 8 Efficient subtraction<br>• Step 9 Estimate answers<br>• Step 10 Checking strategies | • Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate<br>• Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why KEY<br>• Estimate and use inverse operations to check answers to a calculation |
| Multiplication and Division | Multiplication and Division A | • Step 1 Multiples of 3<br>• Step 2 Multiply and divide by 6<br>• Step 3 6 times-table and division facts<br>• Step 4 Multiply and divide by 9<br>• Step 5 9 times-table and division facts<br>• Step 6 The 3, 6 and 9 times-tables<br>• Step 7 Multiply and divide by 7<br>• Step 8 7 times-table and division facts<br>• Step 9 11 times-table and division facts<br>• Step 10 12 times-table and division facts<br>• Step 11 Multiply by 1 and 0<br>• Step 12 Divide a number by 1 and itself<br>• Step 13 Multiply three numbers | • Recall multiplication and division facts for multiplication tables up to 12 × 12 KEY<br>• Recognise and use factor pairs and commutativity in mental calculations<br>• Count in multiples of 6, 7, 9, 25 and 1,000 KEY<br>• Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers |
| Multiplication and Division | Multiplication and Division B | • Step 1 Factor pairs<br>• Step 2 Use factor pairs<br>• Step 3 Multiply by 10<br>• Step 4 Multiply by 100 | • Recognise and use factor pairs and commutativity in mental calculations<br>• Recall multiplication and division facts for multiplication tables up to 12 × 12 KEY |

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| | | • Step 5 Divide by 10<br>• Step 6 Divide by 100<br>• Step 7 Related facts – multiplication and division<br>• Step 8 Informal written methods for multiplication<br>• Step 9 Multiply a 2-digit number by a 1-digit number<br>• Step 10 Multiply a 3-digit number by a 1-digit number<br>• Step 11 Divide a 2-digit number by a 1-digit number (1)<br>• Step 12 Divide a 2-digit number by a 1-digit number (2)<br>• Step 13 Divide a 3-digit number by a 1-digit number<br>• Step 14 Correspondence problems<br>• Step 15 Efficient multiplication | • Solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects<br>• Multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout<br>• Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers |
| Measurement | Length and Perimeter | • Step 1 Measure in kilometres and metres<br>• Step 2 Equivalent lengths (kilometres and metres)<br>• Step 3 Perimeter on a grid<br>• Step 4 Perimeter of a rectangle<br>• Step 5 Perimeter of rectilinear shapes<br>• Step 6 Find missing lengths in rectilinear shapes<br>• Step 7 Calculate perimeter of rectilinear shapes<br>• Step 8 Perimeter of regular polygons<br>• Step 9 Perimeter of polygons | • Convert between different units of measure [for example, kilometre to metre; hour to minute] KEY<br>• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres |
| Measurement | Area | • Step 1 What is area?<br>• Step 2 Count squares<br>• Step 3 Make shapes<br>• Step 4 Compare areas | • Find the area of rectilinear shapes by counting squares |
| FDP | Fractions | • Step 1 Understand the whole<br>• Step 2 Count beyond 1<br>• Step 3 Partition a mixed number<br>• Step 4 Number lines with mixed numbers<br>• Step 5 Compare and order mixed numbers<br>• Step 6 Understand improper fractions<br>• Step 7 Convert mixed numbers to improper fractions<br>• Step 8 Convert improper fractions to mixed numbers<br>• Step 9 Equivalent fractions on a number line<br>• Step 10 Equivalent fraction families<br>• Step 11 Add two or more fractions<br>• Step 12 Add fractions and mixed numbers<br>• Step 13 Subtract two fractions<br>• Step 14 Subtract from whole amounts<br>• Step 15 Subtract from mixed numbers | • Recognise and show, using diagrams, families of common equivalent fractions KEY<br>• Add and subtract fractions with the same denominator |
| FDP | Decimals A | • Step 1 Tenths as fractions<br>• Step 2 Tenths as decimals<br>• Step 3 Tenths on a place value chart<br>• Step 4 Tenths on a number line<br>• Step 5 Divide a 1-digit number by 10<br>• Step 6 Divide a 2-digit number by 10<br>• Step 7 Hundredths as fractions<br>• Step 8 Hundredths as decimals | • Recognise and write decimal equivalents of any number of tenths or hundredths<br>• Compare numbers with the same number of decimal places up to 2 decimal places<br>• Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths |

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| | | • Step 9 Hundredths on a place value chart<br>• Step 10 Divide a 1- or 2-digit number by 100 | • Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 KEY<br>• Recognise and show, using diagrams, families of common equivalent fractions KEY |
| FDP | Decimals B | • Step 1 Make a whole with tenths<br>• Step 2 Make a whole with hundredths<br>• Step 3 Partition decimals<br>• Step 4 Flexibly partition decimals<br>• Step 5 Compare decimals<br>• Step 6 Order decimals<br>• Step 7 Round to the nearest whole number<br>• Step 8 Halves and quarters as decimals | • Recognise and write decimal equivalents of any number of tenths or hundredths<br>• Solve simple measure and money problems involving fractions and decimals to 2 decimal places<br>• Compare numbers with the same number of decimal places up to 2 decimal places<br>• Round decimals with 1 decimal place to the nearest whole number KEY<br>• Recognise and write decimal equivalents to ¼ , ½ and ¾ |
| Measurement | Money | • Step 1 Write money using decimals<br>• Step 2 Convert between pounds and pence<br>• Step 3 Compare amounts of money<br>• Step 4 Estimate with money<br>• Step 5 Calculate with money<br>• Step 6 Solve problems with money | • Estimate, compare and calculate different measures, including money in pounds and pence<br>• |
| Geometry – Properties of Shape | Shape | • Step 1 Understand angles as turns<br>• Step 2 Identify angles<br>• Step 3 Compare and order angles<br>• Step 4 Triangles<br>• Step 5 Quadrilaterals<br>• Step 6 Polygons<br>• Step 7 Lines of symmetry<br>• Step 8 Complete a symmetric figure | • Identify acute and obtuse angles and compare and order angles up to two right angles by size<br>• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes KEY<br>• Identify lines of symmetry in 2-D shapes presented in different orientations KEY<br>• Complete a simple symmetric figure with respect to a specific line of symmetry |
| Statistics | Statistics | • Step 1 Interpret charts<br>• Step 2 Comparison, sum and difference<br>• Step 3 Interpret line graphs<br>• Step 4 Draw line graphs | • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs<br>• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs |
| Geometry – Position and Direction | Position and Direction | • Step 1 Describe position using coordinates<br>• Step 2 Plot coordinates<br>• Step 3 Draw 2-D shapes on a grid<br>• Step 4 Translate on a grid<br>• Step 5 Describe translation on a grid | • Describe positions on a 2-D grid as coordinates in the first quadrant<br>• Plot specified points and draw sides to complete a given polygon KEY<br>• Describe movements between positions as translations of a given unit to the left/right and up/down |
| Measurement | Time | • Step 1 Years, months, weeks and days<br>• Step 2 Hours, minutes and seconds<br>• Step 3 Convert between analogue and digital times<br>• Step 4 Convert to the 24-hour clock<br>• Step 5 Convert from the 24-hour clock | • Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days<br>• Read, write and convert time between analogue and digital 12- and 24-hour clocks |