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Curriculum Mapping – Y4 (**National Curriculum Objectives** WhiteRose Small Steps **NCETM and DfE Ready-to-progress Criteria**)

AUTUMN TERM **SPRING TERM** **SUMMER TERM**

Number: Place Value	Number: Addition and Subtraction	Measurement: Area	Number: Multiplication and Division A
• **Read and write numbers up to 1,000 in numerals and words (Y3)** • **Identify, represent and estimate numbers using different representations.** • **Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) (Y3)** • **Count in multiples of 6, 7, 9, 25 and 1,000** • **Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones)** • **Find 1,000 more or less than a given number.** • **Order and compare numbers beyond 1,000** • **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.** • **Round any number to the nearest 10, 100 or 1,000** • **Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.** • **Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning.** • **Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.** • **Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.** 1. Represent numbers to 1,000 2. Partition numbers to 1,000 3. Number line to 1,000 4. Thousands 5. Represent numbers to 10,000 6. Partition numbers to 10,000 7. Flexible partitioning of numbers to 10,000 8. Find 1, 10, 100, 1,000 more or less 9. Number line to 10,000	• **Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate.** • **Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.** • **Estimate and use inverse operations to check answers to a calculation.** • **Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)** 1. Add and subtract 1s, 10s, 100s and 1,000s 2. Add up to two 4-digit numbers – no exchange 3. Add two 4-digit numbers – one exchange 4. Add two 4-digit numbers – more than one exchange 5. Subtract two 4-digit numbers – no exchange 6. Subtract two 4-digit numbers – one exchange 7. Subtract two 4-digit numbers – more than one exchange 8. Efficient subtraction 9. Estimate answers 10. Checking strategies	• **Find the area of rectilinear shapes by counting squares.** 1. What is area? 2. Count squares 3. Make shapes 4. Compare areas	• **Recall multiplication and division facts for multiplication tables up to 12 × 12** • **Recognise and use factor pairs and commutativity in mental calculations.** • **Count in multiples of 6, 7, 9, 25 and 1,000** • **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.** • **Recall multiplication and division facts up to 12 x 12 , and recognise products in multiplication tables as multiples of the corresponding number.** • **Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.** • **Understand and apply the distributive property of multiplication.** 1. Multiples of 3 2. Multiply and divide by 6 3. 6 times-table and division facts 4. Multiply and divide by 9 5. 9 times-table and division facts 6. The 3, 6 and 9 times-tables 7. Multiply and divide by 7 8. 7 times-table and division facts 9. 11 times-table and division facts 10. 12 times-table and division facts 11. Multiply and divide by 0 12. Divide a number by 1 and itself 13. Multiply 3 numbers

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10.Estimate on a number line to 10,000 11.Compare numbers to 10,000 12.Order numbers to 10,000 13.Roman numerals 14.Round to the nearest 10 15.Round to the nearest 100 16.Round to the nearest 1,000 17.Round to the nearest 10, 100 or 1,000			
Number: Multiplication and Division B	**Measurement: Length and Perimeter**	**Number: Fractions**	**Number: Decimals A**
• **Recognise and use factor pairs and commutativity in mental calculations.** • **Recall multiplication and division facts for multiplication tables up to 12 × 12** • **Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 (Y5)** • **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.** • **Multiply 2-digit and 3-digit numbers by a 1-digit number using a formal written layout.** • **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.** • **Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.** • **Recall multiplication and division facts up to , and recognise products in multiplication tables as multiples of the corresponding number.** • **Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders and interpret remainders appropriately according to the context.** • **Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).** • **Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.** 1. Factor pairs	• **Convert between different units of measure [for example, kilometre to metre; hour to minute].** • **Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.** • **Find the perimeter of regular and irregular polygons.** 1. Measure in kilometres and metres 2. Equivalent lengths (kilometres and metres) 3. Perimeter on a grid 4. Perimeter of a rectangle 5. Perimeter of rectilinear shapes 6. Find missing lengths in rectilinear shapes 7. Calculate perimeter of rectilinear shapes 8. Perimeter of regular polygons 9. Perimeter of polygons	• **Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (Y3).** • **Convert mixed numbers to improper fractions and vice versa.** • **Reason about the location of mixed numbers in the linear number system.** • **Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.** • **Recognise and show, using diagrams, families of common equivalent fractions.** • **Add and subtract fractions with the same denominator.** 1. Understand the whole 2. Count beyond 1 3. Partition a mixed number 4. Number lines with mixed numbers 5. Compare and order mixed numbers 6. Understand improper fractions 7. Convert mixed numbers to improper fractions 8. Convert improper fractions to mixed numbers 9. Equivalent fractions on a number line 10. Equivalent fraction families 11. Add two or more fractions 12. Add fractions and mixed numbers 13. Subtract two fractions 14. Subtract from whole amounts 15. Subtract from mixed numbers	• **Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10 (Y3).** • **Recognise and write decimal equivalents of any number of tenths or hundredths.** • **Compare numbers with the same number of decimal places up to 2 decimal places.** • **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.** • **Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10.** • **Recognise and show, using diagrams, families of common equivalent fractions.** • **Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.** 1. Tenths as fractions 2. Tenths as decimals 3. Tenths on a place value chart 4. Tenths on a number line 5. Divide a 1-digit number by 10 6. Divide a 2-digit number by 10 7. Hundredths as fractions 8. Hundredths as decimals 9. Hundredths on a place value chart 10. Divide a 1- or 2-digit number by 100

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2. Use factor pairs 3. Multiply by 10 4. Multiply by 100 5. Divide by 10 6. Divide by 100 7. Related facts – multiplication and division 8. Informal methods for multiplication 9. Multiply a 2-digit number by a 1-digit number 10. Multiply a 3-digit number by a 1-digit number 11. Divide a 2-digit number by a 1-digit number 12. Divide a 3-digit number by a 1-digit number 13. Correspondence problems 14. Efficient multiplication			
Number: Decimals B	**Measurement: Money**	**Measurement: Time**	**Geometry: Shape**
• **Recognise and write decimal equivalents of any number of tenths or hundredths.** • **Solve simple measure and money problems involving fractions and decimals to 2 decimal places.** • **Round decimals with 1 decimal place to the nearest whole number.** • **Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}$ and $\frac{3}{4}$.** • **Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.** 1. Make a whole with tenths 2. Make a whole with hundredths 3. Partition decimals 4. Flexibly partition decimals 5. Compare decimals 6. Order decimals 7. Round to the nearest whole number 8. Halves and quarters as decimals	• **Estimate, compare and calculate different measures, including money in pounds and pence.** 1. Write money using decimals 2. Convert between pounds and pence 3. Compare amounts of money 4. Estimate with money 5. Calculate with money 6. Solve problems with money	• **Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days.** • **Read, write and convert time between analogue and digital 12- and 24-hour clocks.** 1. Years, months, weeks and days 2. Hours, minutes and seconds 3. Convert between analogue and digital times 4. Convert to the 24-hour clock 5. Convert from the 24-hour clock	• **Recognise angles as a property of shape or a description of a turn (Y3).** • **Identify acute and obtuse angles and compare and order angles up to two right angles by size.** • **Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.** • **Identify lines of symmetry in 2-D shapes presented in different orientations.** • **Complete a simple symmetric figure with respect to a specific line of symmetry.** • **Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal.** • **Identify line symmetry in 2D shapes presented in different orientations.** • **Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.** 1. Understand angles as turns 2. Identify angles 3. Compare and order angles 4. Triangles 5. Quadrilaterals 6. Polygons 7. Lines of symmetry 8. Complete a symmetric figure
Statistics	**Geometry: Position and Direction**		
• **Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.**	• **Describe positions on a 2-D grid as coordinates in the first quadrant.** • **Plot specified points and draw sides to complete a given polygon.**		

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• **Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.** • **Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.** 1. Interpret charts 2. Comparison, sum and difference 3. Interpret line graphs 4. Draw line graphs	• **Describe movements between positions as translations of a given unit to the left/right and up/down.** • **Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.** 1. Describe position using coordinates 2. Plot coordinates 3. Draw 2-D shapes on a grid 4. Translate on a grid 5. Describe a translation on a grid