Year 3/4 overview

This mixed-age plan follows the same progression as the White Rose Maths mixed-age planning, except where divergence improves the alignment of the *Power Maths* lessons.

The main aim of these plans is to allow teachers to cover the same topic with both groups.

Note: The colours used in these charts refer to the strand colours used in the Textbook.

Year 3	Year 4	Number of lessons
Autumn term		**58**
Unit 1: Place value within 1,000 • Recognise the place value of each digit in a two-digit number (tens, ones) [Year 2]. • Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • Compare and order numbers up to 1,000. • Identify, represent and estimate numbers using different representations.	**Unit 1: Place value – 4-digit numbers (1)** • Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number [Year 3]. • Count in multiples of 6, 7, 9, 25 and 1,000. • Find 1,000 more or less than a given number. • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). • Identify, represent and estimate numbers using different representations.	**17**
	Unit 2: Place value – 4-digit numbers (2) • Count in multiples of 6, 7, 9, 25 and 1000. • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). • Order and compare numbers beyond 1,000. • Identify, represent and estimate numbers using different representations. • Round any number to the nearest 10, 100 or 1,000. • Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value.	

Year 3	Year 4	Number of lessons
Unit 2: Addition and subtraction (1) • Recognise the place value of each digit in a two-digit number (tens, ones) [Year 2]. • Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds. • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	**Unit 3: Addition and subtraction** • Solve number and practical problems that involve all of the above and with increasingly large positive numbers. • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. • Estimate and use inverse operations to check answers to a calculation. • Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	**23**
Unit 3: Addition and subtraction (2) • Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds. • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. • Estimate the answer to a calculation and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.		

Year 3	Year 4	Number of lessons
Unit 4: Multiplication and division (1) • Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.	**Unit 5: Multiplication and division (1)** • Recall multiplication and division facts for multiplication tables up to 12 × 12. • 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.	**18**
Unit 5: Multiplication and division (2) • Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.		

Year 3	Year 4	Number of lessons
Spring term		**62**
Unit 6: Multiplication and division (3) • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	**Unit 6: Multiplication and division (2)** • Recall multiplication and division facts for multiplication tables up to 12 × 12. • 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. • Recognise and use factor pairs and commutativity in mental calculations. • Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. • Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	**18**
Unit 7: Length and perimeter • Measure, compare, add and subtract: lengths (m/cm/mm). • Measure the perimeter of simple 2D shapes.	**Unit 4: Measure – area** • Find the area of rectilinear shapes by counting squares. • Estimate, compare and calculate different measures, including money in pounds and pence.	**12**

Year 3	Year 4	Number of lessons
	Unit 7: Length and perimeter • 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.	
Unit 8: Fractions (1) • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. • Recognise and show, using diagrams, equivalent fractions with small denominators. • Compare and order unit fractions, and fractions with the same denominators.	**Unit 8: Fractions (1)** • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators [Year 3]. • Recognise and show, using diagrams, equivalent fractions with small denominators [Year 3]. • Compare and order unit fractions, and fractions with the same denominators [Year 3]. • Recognise and show, using diagrams, families of common equivalent fractions.	**18**
Unit 11: Fractions (2) • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. • Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]. • Solve problems that involve all of the above.	**Unit 9: Fractions (2)** • Add and subtract fractions with the same denominator. • Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.	

Year 3	Year 4	Number of lessons
Unit 9: Mass • Measure, compare, add and subtract: mass (kg/g).	**Unit 10: Decimals (1)** • Recognise and write decimal equivalents of any number of tenths or hundredths. • Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.	**14**
Unit 10: Capacity • Measure, compare, add and subtract: volume/capacity (l/ml).		

<table>
<tr><th>Year 3</th><th>Year 4</th><th>Number of lessons</th></tr>
<tr><td colspan="2">Summer term</td><td>41</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td rowspan="2">Unit 13: Time
Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.
Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o’clock, a.m./p.m., morning, afternoon, noon and midnight.
Know the number of seconds in a minute and the number of days in each month, year and leap year.
Compare durations of events [for example to calculate the time taken by particular events or tasks].</td><td>Unit 11: Decimals (2)
Recognise and write decimal equivalents of any number of tenths or hundredths.
Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.
Round decimals with one decimal place to the nearest whole number.
Compare numbers with the same number of decimal places up to two decimal places.</td><td rowspan="2">13</td></tr>
<tr><td>Unit 13: Time
Convert between different units of measure [for example, kilometre to metre; hour to minute].
Read, write and convert time between analogue and digital 12- and 24-hour clocks.
Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</td></tr>
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Year 3	Year 4	Number of lessons
Unit 14: Angles and properties of shapes • Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them. • Recognise angles as a property of shape or a description of a turn. • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	**Unit 14: Angles and 2D shapes** • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. • Identify acute and obtuse angles and compare and order angles up to two right angles by size. • Identify lines of symmetry in 2D shapes presented in different orientations. • Complete a simple symmetric figure with respect to a specific line of symmetry.	**9**
Unit 12: Money • Add and subtract amounts of money to give change, using both £ and p in practical contexts.	**Unit 12: Money** • Estimate, compare and calculate different measures, including money in pounds and pence.	**6**
Unit 15: Statistics • Interpret and present data using bar charts, pictograms and tables. • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	**Unit 15: Statistics** • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	**7**

Year 3	Year 4	Number of lessons
Consolidation	**Unit 16: Geometry – position and direction** • Describe positions on a 2D grid as coordinates in the first quadrant. • Describe movements between positions as translations of a given unit to the left/right and up/down. • Plot specified points and draw sides to complete a given polygon.	**6**