

## National curriculum to *Power Maths* matching chart KS2

### Year 3

| National curriculum programmes of study<br>Year 3 |   | <i>Power Maths</i>  |   |   |
|---|---|---|---|---|
| Domain  | Pupils should be taught to:   | Year 2  | Year 3  | Year 4  |
| Number – number and place value                   | <ul style="list-style-type: none"> <li>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2A – Unit 2 Addition and subtraction (1), Lesson 7 (10 more or less)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 7 and 11</li> </ul>  |   |
|   | <ul style="list-style-type: none"> <li>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2A – Unit 1, Numbers to 100, Lessons 3–5 (tens, ones)</li> </ul>                | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 1–7, 9 and 10</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lesson 1</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Compare and order numbers up to 1,000.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 2A – Unit 1, Numbers to 100, Lessons 6–8 (100)</li> </ul>                       | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 6, 8–10</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>Identify, represent and estimate numbers using different representations.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 1–5 and 6</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lesson 9</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Read and write numbers up to 1,000 in numerals and in words.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 2A – Unit 1, Numbers to 100, Lessons 1 and 2 (100)</li> </ul>                   | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 1–6, 8 and 10</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lesson 1</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve number problems and practical problems involving these ideas.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 9 and 11</li> </ul>  |   |
| Number – addition and subtraction                 | <ul style="list-style-type: none"> <li>Add and subtract numbers mentally, including:               <ul style="list-style-type: none"> <li>a three-digit number and ones</li> <li>a three-digit number and tens</li> <li>a three-digit number and hundreds.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Textbook 2C – Unit 12, Problem solving and efficient methods, Lessons 7 and 8</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 2, Addition and subtraction (1), Lessons 1–10</li> <li>Textbook 3A – Unit 3, Addition and subtraction (2), Lessons 1–5</li> </ul> |   |

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|---|--|---|---|---|
| Domain  | Pupils should be taught to:  | Year 2  | Year 3  | Year 4  |
|   | <ul style="list-style-type: none"> <li>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2A – Unit 2 Addition and subtraction (1), Lessons 10 and 12</li> <li>Textbook 2A – Unit 3, Addition and subtraction (2), Lessons 1–3, 6, 8 and 9</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 2, Addition and subtraction (1), Lessons 8–10</li> <li>Textbook 3A – Unit 3, Addition and subtraction (2), Lessons 1–5</li> </ul>                         |   |
|   | <ul style="list-style-type: none"> <li>Estimate the answer to a calculation and use inverse operations to check answers.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 2A – Unit 2, Addition and subtraction (1), Lesson 2</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 3A, Unit 3 – Addition and subtraction (2), Lessons 6 and 7</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2C – Unit 12, Problem solving and efficient methods, Lessons 6 and 10</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 2, Addition and subtraction (1), Lessons 7, 9 and 10</li> <li>Textbook 3A – Unit 3, Addition and subtraction (2), Lessons 1, 3, 5 and 8</li> </ul>        |   |
| Number – multiplication and division              | <ul style="list-style-type: none"> <li>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 4, Multiplication and division (1), Lessons 1–12, 14 and 15</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lesson 8</li> </ul>     |
|   | <ul style="list-style-type: none"> <li>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.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 2B – Unit 6, Multiplication and division (2), Lesson 9</li> <li>Textbook 2C – Unit 12, Problem solving and efficient methods, Lesson 11</li> </ul>          | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 4, Multiplication and division (1), Lessons 1–12, 14 and 15</li> <li>Textbook 3B – Unit 5, Multiplication and division (2), Lessons 2–9, 12–14</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lessons 5–11</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objects.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 4, Multiplication and division (1), Lessons 1–15</li> <li>Textbook 3B – Unit 5, Multiplication and division (2), Lessons 10–14</li> </ul>                 | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lesson 9</li> </ul>     |

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|---|---|---|--|--|
| Domain  | Pupils should be taught to:   | Year 2  | Year 3   | Year 4   |
| Number – fractions                                | <ul style="list-style-type: none"> <li>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.</li> </ul> |   | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 9, Fractions (1), Lessons 3 and 4</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 8, Fractions (1), Lesson 2</li> </ul>        |
|   | <ul style="list-style-type: none"> <li>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</li> </ul>                            |   | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 9, Fractions (1), Lessons 8–10</li> <li>Textbook 3C – Unit 10, Fractions (2), Lesson 9</li> </ul>          |  |
|   | <ul style="list-style-type: none"> <li>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 2B – Unit 10, Fractions, Lessons 7 and 8</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 9, Fractions (1), Lessons 1, 2 and 5–7</li> <li>Textbook 3C – Unit 10, Fractions (2), Lesson 9</li> </ul>  |  |
|   | <ul style="list-style-type: none"> <li>Recognise and show, using diagrams, equivalent fractions with small denominators.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2B – Unit 10, Fractions, Lesson 9</li> </ul>        | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 10, Fractions (2), Lessons 1–4</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 8, Fractions (1), Lessons 1 and 2</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Add and subtract fractions with the same denominator within one whole (for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>).</li> </ul>                  |   | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 10, Fractions (2), Lessons 6–8</li> </ul>  |  |
|   | <ul style="list-style-type: none"> <li>Compare and order unit fractions, and fractions with the same denominators.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 9, Fractions (1), Lessons 5–7</li> <li>Textbook 3C – Unit 10, Fractions (2), Lessons 2, 4 and 5</li> </ul> |  |
|   | <ul style="list-style-type: none"> <li>Solve problems that involve all of the above.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 9, Fractions (1), Lesson 11</li> <li>Textbook 3C – Unit 10, Fractions (2), Lessons 3, 8 and 9</li> </ul>   |  |

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|---|--|--|--|---|
| Domain  | Pupils should be taught to:  | Year 2   | Year 3   | Year 4  |
| Measurement                                       | <ul style="list-style-type: none"> <li>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 8, Length, Lessons 1–7, 10 and 11</li> <li>Textbook 3C – Unit 13, Mass, Lessons 1–6</li> <li>Textbook 3C – Unit 14, Capacity, Lessons 1–6</li> </ul> |   |
|   | <ul style="list-style-type: none"> <li>Measure the perimeter of simple 2D shapes.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 8, Length, Lessons 8–11</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 4, Measure – perimeter, Lessons 2 and 3</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 2C – Unit 12, Problem solving and efficient methods, Lesson 1</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 6, Money, Lessons 1–5</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 12, Money, Lesson 6</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 11, Time, Lessons 2–4 and 7</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>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.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 2C – Unit 13, Time, Lesson 3 (nearest 5 minutes)</li> </ul>              | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 11, Time, Lessons 2, 5–11</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>Know the number of seconds in a minute and the number of days in each month, year and leap year.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 11, Time, Lesson 1</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lesson 9</li> <li>Textbook 4C – Unit 13, Time, Lessons 3–5</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Compare durations of events (for example to calculate the time taken by particular events or tasks).</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2C – Unit 13, Time, Lesson 6</li> </ul>                                  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 11, Time, Lesson 9</li> </ul>  |   |

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|---|---|--|---|---|
| Domain  | Pupils should be taught to:   | Year 2   | Year 3  | Year 4  |
| Geometry – properties of shapes                   | <ul style="list-style-type: none"> <li>Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 12, Angles and properties of shapes, Lessons 4, 7–9</li> </ul>  |   |
|   | <ul style="list-style-type: none"> <li>Recognise angles as a property of shape or a description of a turn.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2C – Unit 11, Position and direction, Lessons 2 and 3</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 12, Angles and properties of shapes, Lessons 1–3</li> </ul>     |   |
|   | <ul style="list-style-type: none"> <li>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.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 2C – Unit 11, Position and direction, Lesson 2</li> </ul>        | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 12, Angles and properties of shapes, Lessons 1–3</li> </ul>     |   |
|   | <ul style="list-style-type: none"> <li>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 12, Angles and properties of shapes, Lessons 5 and 6</li> </ul> |   |
| Statistics  | <ul style="list-style-type: none"> <li>Interpret and present data using bar charts, pictograms and tables.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 2B – Unit 7, Statistics, Lessons 2–5 (pictograms)</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 7, Statistics, Lessons 1 and 3</li> </ul>                       | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 14, Statistics, Lessons 1, 2 and 5</li> </ul> |
|   | <ul style="list-style-type: none"> <li>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.</li> </ul>                                     | <ul style="list-style-type: none"> <li>Textbook 2B – Unit 7, Statistics, Lessons 4 and 5 (pictograms)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 7, Statistics, Lessons 2, 4 and 5</li> </ul>                    | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 14, Statistics, Lessons 2 and 5</li> </ul>    |

## Year 4

| National curriculum programmes of study<br>Year 4 |   | Power Maths  |   |  |
|---|---|--|---|--|
| Domain  | Pupils should be taught to:   | Year 3   | Year 4  | Year 5   |
| Number – number and place value                   | <ul style="list-style-type: none"> <li>Count in multiples of 6, 7, 9, 25 and 1,000.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lesson 4 (1,000s)</li> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lesson 7 (25s)</li> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lessons 5–8</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 7 (10s, 100s, 1,000s, 10,000s)</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Find 1,000 more or less than a given number.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lesson 1</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Count backwards through zero to include negative numbers.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lessons 8 and 9 (1,000 more or less)</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 6</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 2–6 (three-digit number)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lessons 1, 5–8</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Order and compare numbers beyond 1,000.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lesson 8</li> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lessons 2–4</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lesson 6</li> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 4</li> </ul> |

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|---|--|--|---|---|
| Domain  | Pupils should be taught to:  | Year 3   | Year 4  | Year 5  |
|   | <ul style="list-style-type: none"> <li>Identify, represent and estimate numbers using different representations.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 1, Place value within 1,000, Lessons 5 and 6</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lessons 4–8</li> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lessons 2–4</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lesson 8</li> </ul>        |
|   | <ul style="list-style-type: none"> <li>Round any number to the nearest 10, 100 or 1,000.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 4A, Unit 1, Place value – 4-digit numbers (1), Lessons 2 and 3</li> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lessons 5 and 6</li> <li>Textbook 4A – Unit 3, Addition and subtraction, Lessons 9 and 10</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lessons 2 and 7</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</li> </ul>                        |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lesson 6</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>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</li> </ul> |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lesson 9</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lesson 8</li> </ul>        |
| Number – addition and subtraction                 | <ul style="list-style-type: none"> <li>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 2, Addition and subtraction (1), Lessons 8–10</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 3, Addition and subtraction, Lessons 1–8</li> </ul>   |   |
|   | <ul style="list-style-type: none"> <li>Estimate and use inverse operations to check answers to a calculation.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 3, Addition and subtraction (2), Lesson 7</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 4A - Unit 3, Addition and subtraction, Lessons 9–11</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lesson 8</li> </ul>          |



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|---|---|--|--|--|
| Domain  | Pupils should be taught to:   | Year 3   | Year 4   | Year 5   |
|   | <ul style="list-style-type: none"> <li>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 3, Addition and subtraction, Lessons 1, 12–15</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lessons 9 and 10</li> </ul>   |
| Number – multiplication and division              | <ul style="list-style-type: none"> <li>Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 3A – Unit 4, Multiplication and division (1), Lessons 4, 7, 10–12 (3, 4 and 8)</li> <li>Textbook 3B – Unit 5, Multiplication and division (2), Lesson 4</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lessons 1, 2, 5–11</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lessons 1–6</li> </ul> |
|   | <ul style="list-style-type: none"> <li>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.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lessons 1–4</li> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lessons 11–14</li> </ul> |  |
|   | <ul style="list-style-type: none"> <li>Recognise and use factor pairs and commutativity in mental calculations.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lesson 8</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lesson 2</li> </ul>    |
|   | <ul style="list-style-type: none"> <li>Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 5, Multiplication and division (2), Lesson 7</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lessons 3–6, 11 and 13</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 7, Multiplication and division (2), Lesson 1</li> </ul>    |
|   | <ul style="list-style-type: none"> <li>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 <math>n</math> objects are connected to <math>m</math> objects.</li> </ul> |  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lessons 1, 2, 6, 7, 10 and 15</li> </ul>   |  |
| Number – fractions (including decimals)           | <ul style="list-style-type: none"> <li>Recognise and show, using diagrams, families of common equivalent fractions.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 10, Fractions (2), Lessons 4 and 5</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 8, Fractions (1), Lessons 3–5</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 8, Fractions (1), Lesson 1</li> </ul>                      |



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|---|--|---|--|--|
| Domain  | Pupils should be taught to:  | Year 3  | Year 4   | Year 5   |
|   | <ul style="list-style-type: none"> <li>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> </ul>  |   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 8, Fractions (1), Lessons 1 and 2</li> <li>Textbook 4B – Unit 10, Decimals (1), Lessons 6–8</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>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.</li> </ul> |   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 8, Fractions (1), Lessons 6 and 7</li> <li>Textbook 4B – Unit 9, Fractions (2), Lessons 2–8</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Add and subtract fractions with the same denominator.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 10, Fractions (2), Lessons 6 and 7</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 9, Fractions (2), Lessons 1–3</li> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 1</li> </ul>          | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 9, Fractions (2), Lesson 1</li> </ul>                |
|   | <ul style="list-style-type: none"> <li>Recognise and write decimal equivalents of any number of tenths or hundredths.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 10, Decimals (1), Lessons 1–3, 6 and 7</li> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 1</li> </ul> |  |
|   | <ul style="list-style-type: none"> <li>Recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math> and <math>\frac{3}{4}</math>.</li> </ul>  |   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 6</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 3–6</li> </ul> |
|   | <ul style="list-style-type: none"> <li>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.</li> </ul>                              |   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 10, Decimals (1), Lessons 4, 5, 8–10</li> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 1</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Round decimals with one decimal place to the nearest whole number.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 5</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lesson 9</li> </ul>    |

| National curriculum programmes of study<br>Year 4 |  | Power Maths  |  |  |
|---|--|--|--|--|
| Domain  | Pupils should be taught to:  | Year 3   | Year 4   | Year 5   |
|   | <ul style="list-style-type: none"> <li>Compare numbers with the same number of decimal places up to two decimal places.</li> </ul>                               |  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 11, Decimals (2), Lessons 3 and 4</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 7 and 8</li> </ul>     |
|   | <ul style="list-style-type: none"> <li>Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul>                | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 9, Fractions (1), Lessons 10 and 11</li> <li>Textbook 3C – Unit 10, Fractions (2), Lesson 9</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 10, Decimals (1), Lesson 3</li> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 7</li> <li>Textbook 4C – Unit 12, Money, Lessons 1–4, 7–9</li> </ul> |  |
| Measurement                                       | <ul style="list-style-type: none"> <li>Convert between different units of measure (for example, kilometre to metre; hour to minute).</li> </ul>                  | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 8, Length, Lessons 3–5</li> <li>Textbook 3C – Unit 11, Time, Lesson 11</li> </ul>                      | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 4, Measure – perimeter, Lesson 1</li> <li>Textbook 4C – Unit 13, Time, Lessons 1–5</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lessons 1–4 and 8</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 8, Length, Lessons 8 and 9</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 4, Measure – perimeter, Lessons 2–5</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 6, Measure – area and perimeter, Lessons 1–3</li> </ul>      |
|   | <ul style="list-style-type: none"> <li>Find the area of rectilinear shapes by counting squares.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 7, Measure – area, Lessons 1–4</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 6, Measure – area and perimeter, Lesson 4</li> </ul>         |
|   | <ul style="list-style-type: none"> <li>Estimate, compare and calculate different measures, including money in pounds and pence.</li> </ul>                       | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 6, Money, Lessons 3–5</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 7, Measure – area, Lesson 5</li> <li>Textbook 4C – Unit 12, Money, Lessons 1–9</li> </ul>  |  |
|   | <ul style="list-style-type: none"> <li>Read, write and convert time between analogue and digital 12- and 24-hour clocks.</li> </ul>                              |  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 13, Time, Lessons 3 and 4</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 11, Time, Lessons 1, 2 and 11</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lesson 9</li> <li>Textbook 4C – Unit 13, Time, Lesson 5</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lesson 8 and 9</li> </ul>    |

| National curriculum programmes of study<br>Year 4 |   | Power Maths   |  |   |
|---|---|---|--|---|
| Domain  | Pupils should be taught to:   | Year 3  | Year 4   | Year 5  |
| Geometry – properties of shapes                   | <ul style="list-style-type: none"> <li>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 12, Angles and properties of shapes, Lessons 7 and 8</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 15, Geometry – angles and 2D shapes, Lessons 3–6</li> </ul>          |   |
|   | <ul style="list-style-type: none"> <li>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</li> </ul>                       | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 12, Angles and properties of shapes, Lesson 3</li> </ul>        | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 15, Geometry – angles and 2D shapes, Lessons 1 and 2</li> </ul>      | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 13, Geometry – properties of shapes (1), Lessons 2 and 3</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Identify lines of symmetry in 2D shapes presented in different orientations.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 3C – Unit 12, Angles and properties of shapes, Lesson 5</li> </ul>        | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 15, Geometry – angles and 2D shapes, Lessons 7 and 8</li> </ul>      |   |
|   | <ul style="list-style-type: none"> <li>Complete a simple symmetric figure with respect to a specific line of symmetry.</li> </ul>                                     |   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 15, Geometry – angles and 2D shapes, Lessons 9 and 10</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 15, Geometry – position and direction, Lesson 1</li> </ul>          |
| Geometry – position and direction                 | <ul style="list-style-type: none"> <li>Describe positions on a 2D grid as coordinates in the first quadrant.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 16, Geometry – position and direction, Lessons 1, 2 and 4</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 15, Geometry – position and direction, Lessons 2 and 4</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Describe movements between positions as translations of a given unit to the left/right and up/down.</li> </ul>                 |   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 16, Geometry – position and direction, Lessons 5 and 6</li> </ul>    | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 15, Geometry – position and direction, Lessons 3 and 4</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Plot specified points and draw sides to complete a given polygon.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 16, Geometry – position and direction, Lesson 3</li> </ul>           |   |

Power Maths National curriculum matching

| National curriculum programmes of study<br>Year 4 |   | Power Maths   |   |  |
|---|---|---|---|--|
| Domain  | Pupils should be taught to:   | Year 3  | Year 4  | Year 5   |
| Statistics  | <ul style="list-style-type: none"> <li>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 7, Statistics, Lessons 3 and 4</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 14, Statistics, Lessons 1 and 3</li> </ul>    | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 4, Graphs and tables, Lessons 3–5</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 3B – Unit 7, Statistics, Lessons 1–5</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 14, Statistics, Lessons 2, 4 and 5</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 4, Graphs and tables, Lessons 1–5</li> </ul> |

## Year 5

| National curriculum programmes of study<br>Year 5 |   | Power Maths  |  |   |
|---|---|--|--|---|
| Domain  | Pupils should be taught to:   | Year 4   | Year 5   | Year 6  |
| Number – number and place value                   | <ul style="list-style-type: none"> <li>Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.</li> </ul>                                   |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lessons 1, 3 (10,000), 5 and 6 (100,000)</li> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lessons 1, 3 and 4</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 1, Place value within 10,000,000, Lessons 1–5</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lesson 2 (1,000)</li> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 7</li> </ul>                                   |   |
|   | <ul style="list-style-type: none"> <li>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lessons 8 and 9</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 6</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 1, Place value within 10,000,000, Lesson 7</li> <li>Textbook 6C – Unit 14, Problem solving, Lesson 2</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lessons 2 (10) and 3 (100)</li> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lesson 5 (1,000)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lessons 2 (1,000) and 7 (100,000)</li> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 5</li> </ul>                  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 1, Place value within 10,000,000, Lesson 6</li> </ul>   |

| National curriculum programmes of study<br>Year 5 |   | Power Maths   |   |  |
|---|---|---|---|--|
| Domain  | Pupils should be taught to:   | Year 4  | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Solve number problems and practical problems that involve all of the above.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lesson 4</li> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lessons 2 and 8</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 14, Problem solving, Lesson 1</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lesson 9 (100)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lesson 8</li> </ul>  |  |
| Number – addition and subtraction                 | <ul style="list-style-type: none"> <li>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).</li> </ul> |   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lessons 1–4</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 2, Four operations (1), Lesson 1</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Add and subtract numbers mentally with increasingly large numbers.</li> </ul>  |   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lessons 6 and 7</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lessons 7 and 8</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> </ul>                       | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 3, Addition and subtraction, Lesson 10</li> </ul>               | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lesson 5</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lesson 9</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>               | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 3, Addition and subtraction, Lessons 1, 12–15</li> </ul>        | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lessons 7, 9 and 10</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 2, Four operations (1), Lessons 1 and 2</li> <li>Textbook 6C – Unit 14, Problem solving, Lesson 3</li> </ul> |
| Number – multiplication and division              | <ul style="list-style-type: none"> <li>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</li> </ul>                  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lesson 8</li> </ul>         | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lessons 1, 2 and 6</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lessons 1 and 2</li> </ul>   |

| National curriculum programmes of study<br>Year 5 |   | Power Maths  |   |  |
|---|---|--|---|--|
| Domain  | Pupils should be taught to:   | Year 4   | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lesson 3</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lesson 3</li> </ul>        |
|   | <ul style="list-style-type: none"> <li>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lesson 3</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lesson 3</li> </ul>        |
|   | <ul style="list-style-type: none"> <li>Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.</li> </ul>             | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lessons 4 (2 digits) and 5 (3 digits)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 7, Multiplication and division (2), Lessons 1 and 4–6</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 2, Four operations (1), Lessons 3 and 4</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Multiply and divide numbers mentally drawing upon known facts.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 7, Multiplication and division (2), Lessons 2 and 3</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lesson 7</li> </ul>        |
|   | <ul style="list-style-type: none"> <li>Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.</li> </ul> |  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 7, Multiplication and division (2), Lessons 7–11</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 10, Decimals (1), Lessons 4, 5, 9 and 10</li> </ul>                                  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lessons 8–10</li> <li>Textbook 5C – Unit 12, Decimals, Lessons 12–15</li> </ul> |  |
|   | <ul style="list-style-type: none"> <li>Recognise and use square numbers and cube numbers, and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>).</li> </ul>                                |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lessons 5 and 6</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lesson 4</li> </ul>        |
|   | <ul style="list-style-type: none"> <li>Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.</li> </ul>                             |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lessons 1, 4–7 and 9</li> </ul>   |  |



| National curriculum programmes of study<br>Year 5       |   | Power Maths  |   |  |
|---|---|--|---|--|
| Domain  | Pupils should be taught to:   | Year 4   | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.</li> <li>Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 6, Multiplication and division (2), Lessons 1 and 2</li> </ul> |   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 14, Problem solving, Lessons 4 and 5</li> <li>Textbook 6B – Unit 10, Measure – imperial and metric measures, Lessons 9 and 10</li> </ul> |
| Number – fractions (including decimals and percentages) | <ul style="list-style-type: none"> <li>Compare and order fractions whose denominators are all multiples of the same number.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 8, Fractions (1), Lessons 4–6</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 4, Fractions (1), Lessons 2–4</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 8, Fractions (1), Lesson 1</li> </ul>                          | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 8, Fractions (1), Lesson 1</li> <li>Textbook 5B – Unit 11, Decimals and percentages, Lesson 12</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number (for example, <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}</math>).</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 8, Fractions (1), Lessons 2, 3 and 6–8</li> <li>Textbook 5B – Unit 9, Fractions (2), Lessons 4–10</li> <li>Textbook 5B – Unit 10, Fractions (3), Lessons 1–4 and 6</li> </ul> |  |
|   | <ul style="list-style-type: none"> <li>Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 9, Fractions (2), Lessons 1–5</li> </ul>                       | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 9, Fractions (2), Lessons 1–12</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 4, Fractions (1), Lesson 6</li> </ul>  |

| National curriculum programmes of study<br>Year 5 |  | Power Maths   |   |  |
|---|--|---|---|--|
| Domain  | Pupils should be taught to:  | Year 4  | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 10, Fractions (3), Lessons 1–7</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 5, Fractions (2), Lesson 1</li> </ul>    |
|   | <ul style="list-style-type: none"> <li>Read and write decimal numbers as fractions (for example, <math>0.71 = \frac{71}{100}</math>).</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 6</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 3 and 4</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 7, Decimals, Lessons 3 and 4</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 5 and 6</li> <li>Textbook 5C – Unit 12, Decimals, Lessons 12–15</li> </ul>  |  |
|   | <ul style="list-style-type: none"> <li>Round decimals with two decimal places to the nearest whole number and to one decimal place.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 5 (decimals with one decimal place)</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lesson 9</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Read, write, order and compare numbers with up to three decimal places.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 11, Decimals (2), Lesson 3 and 4 (two decimal places)</li> <li>Textbook 4C – Unit 12, Money, Lesson 3 (two decimal places)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 1, 2, 7 and 8</li> <li>Textbook 5C – Unit 12, Decimals, Lesson 9</li> </ul> |  |
|   | <ul style="list-style-type: none"> <li>Solve problems involving number up to three decimal places.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 12, Money, Lessons 6–9 (two decimal places)</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 12, Decimals, Lessons 1–8, 10–15</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 14, Problem solving, Lesson 7</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Recognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimal.</li> </ul> |   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 10–12</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 8, Percentages, Lesson 1</li> </ul>      |

| National curriculum programmes of study<br>Year 5 |   | Power Maths  |   |  |
|---|---|--|---|--|
| Domain  | Pupils should be taught to:   | Year 4   | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25.</li> </ul> |  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lesson 12</li> </ul>        | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 14, Problem solving, Lessons 6 and 7</li> </ul>                        |
| Measurement                                       | <ul style="list-style-type: none"> <li>Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 4, Measure – perimeter, Lesson 1</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lessons 1–4</li> </ul>    | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 10, Measure – imperial and metric measures, Lessons 1–3</li> </ul>     |
|   | <ul style="list-style-type: none"> <li>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lessons 5–7</li> </ul>    | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 10, Measure – imperial and metric measures, Lessons 4 and 5</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 4, Measure – perimeter, Lessons 4 and 5</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 6, Measure – area and perimeter, Lessons 1–3</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes.</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 6, Measure – area and perimeter, Lessons 4–7</li> </ul>   |  |
|   | <ul style="list-style-type: none"> <li>Estimate volume (for example, using 1 cm<sup>3</sup> blocks to build cuboids (including cubes)) and capacity (for example, using water).</li> </ul>  |  | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 17, Measure – volume and capacity, Lessons 1–4</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 11, Measure – perimeter, area and volume, Lessons 10 and 11</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve problems involving converting between units of time.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 5, Multiplication and division (1), Lesson 9</li> <li>Textbook 4C – Unit 13, Time, Lesson 5</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lesson 8 and 9</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 14, Problem solving, Lessons 10 and 11</li> </ul>                      |
|   |   |  |   |  |

| National curriculum programmes of study<br>Year 5 |   | Power Maths   |   |   |
|---|---|---|---|---|
| Domain  | Pupils should be taught to:   | Year 4  | Year 5  | Year 6  |
|   | <ul style="list-style-type: none"> <li>Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lessons 4 and 10</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 14, Problem solving, Lessons 4 and 5</li> </ul>   |
| Geometry – properties of shapes                   | <ul style="list-style-type: none"> <li>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 14, Geometry – properties of shapes (2), Lesson 5</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lessons 11 and 12</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 15, Geometry – angles and 2D shapes, Lessons 1 and 2</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 13, Geometry – properties of shapes (1), Lessons 2 and 3</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lesson 1</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Draw given angles, and measure them in degrees (<math>^{\circ}</math>).</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 13, Geometry – properties of shapes (1), Lessons 2–4</li> <li>Textbook 5C – Unit 14, Geometry – properties of shapes (2), Lesson 3</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lessons 1 and 2</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Identify                             <ul style="list-style-type: none"> <li>angles at a point and one whole turn (total <math>360^{\circ}</math>)</li> <li>angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total <math>180^{\circ}</math>)</li> <li>other multiples of <math>90^{\circ}</math>.</li> </ul> </li> </ul> |   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 13, Geometry – properties of shapes (1), Lessons 1, 3, 5 and 6</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lesson 8</li> <li>Textbook 6C – Unit 14, Problem solving, Lessons 13 and 14</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 13, Geometry – properties of shapes (1), Lesson 7</li> <li>Textbook 5C – Unit 14, Geometry – properties of shapes (2), Lessons 1 and 2</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lessons 6 and 7</li> </ul>   |

| National curriculum programmes of study<br>Year 5 |  | Power Maths   |   |  |
|---|--|---|---|--|
| Domain  | Pupils should be taught to:  | Year 4  | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 15, Geometry – angles and 2D shapes, Lesson 3</li> </ul>          | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 14, Geometry – properties of shapes (2), Lesson 4</li> </ul>  |  |
| Geometry – position and direction                 | <ul style="list-style-type: none"> <li>Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 16, Geometry – position and direction, Lessons 5 and 6</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 15, Geometry – position and direction, Lessons 1–4</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 6, Geometry – position and direction, Lessons 3 and 4</li> </ul> |
| Statistics  | <ul style="list-style-type: none"> <li>Solve comparison, sum and difference problems using information presented in a line graph.</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 14, Statistics, Lessons 3 and 4</li> </ul>                        | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 4, Graphs and tables, Lessons 3–5</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 15, Statistics, Lessons 9 and 10</li> </ul>                      |
|   | <ul style="list-style-type: none"> <li>Complete, read and interpret information in tables, including timetables.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 14, Statistics, Lesson 1 (tables)</li> </ul>                      | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 4, Graphs and tables, Lessons 1–2</li> <li>Textbook 5C – Unit 16, Measure – converting units, Lesson 9</li> </ul> |  |

## Year 6

| National curriculum programmes of study<br>Year 6           |   | Power Maths  |  |   |
|---|---|--|--|---|
| Domain  | Pupils should be taught to:   | Year 4   | Year 5   | Year 6  |
| Number – number and place value                             | <ul style="list-style-type: none"> <li>Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</li> </ul>                                  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lessons 1 (1,000) and 5–8 (10,000)</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 10,000, Lessons 1, 3, 4 (10,000) and 5 (100,000)</li> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lessons 1–4 (1,000,000)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 1, Place value within 10,000,000, Lessons 1–5</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Round any whole number to a required degree of accuracy.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4A – Unit 1, Place value – 4-digit numbers (1), Lessons 2 (10) and 3 (100)</li> <li>Textbook 4A – Unit 2, Place value – 4-digit numbers (2), Lesson 5 (1,000)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 1, Place value within 100,000, Lessons 2 and 7</li> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 5</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 1, Place value within 10,000,000, Lesson 6</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Use negative numbers in context, and calculate intervals across zero.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 2, Place value within 1,000,000, Lesson 6</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 1, Place value within 10,000,000, Lesson 7</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Solve number and practical problems that involve all of the above.</li> </ul>  |  |  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 1, Place value within 10,000,000, Lessons 1–5</li> <li>Textbook 6C – Unit 14, Problem solving, Lessons 1 and 2</li> </ul> |
| Number – addition, subtraction, multiplication and division | <ul style="list-style-type: none"> <li>Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.</li> </ul> |  | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 7, Multiplication and division (2), Lesson 6</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 2, Four operations (1), Lessons 3 and 4</li> </ul>  |

| National curriculum programmes of study<br>Year 6 |   | Power Maths |   |  |
|---|---|-------------|---|--|
| Domain  | Pupils should be taught to:   | Year 4      | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.</li> </ul> |             |   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 2, Four operations (1), Lessons 7–10</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.</li> </ul>  |             |   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 2, Four operations (1), Lessons 5 and 6</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Perform mental calculations, including with mixed operations and large numbers.</li> </ul>   |             | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lessons 6 and 7</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lessons 7 and 8</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Identify common factors, common multiples and prime numbers.</li> </ul>  |             | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 5, Multiplication and division (1), Lessons 1–4</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lessons 1–3</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Use their knowledge of the order of operations to carry out calculations involving the four operations.</li> </ul>   |             |   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lessons 5, 6 and 9</li> <li>Textbook 6A – Unit 5, Fractions (2), Lesson 7</li> <li>Textbook 6C – Unit 14, Problem solving, Lesson 4</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>   |             | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 3, Addition and subtraction, Lessons 7, 9 and 10</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 14, Problem solving, Lesson 3</li> </ul>   |



| National curriculum programmes of study<br>Year 6       |  | Power Maths   |   |   |
|---|--|---|---|---|
| Domain  | Pupils should be taught to:  | Year 4  | Year 5  | Year 6  |
|   | <ul style="list-style-type: none"> <li>Solve problems involving addition, subtraction, multiplication and division.</li> </ul>   |   |   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 3, Four operations (2), Lesson 9</li> <li>Textbook 6C – Unit 14, Problem solving, Lessons 3–5</li> </ul>    |
|   | <ul style="list-style-type: none"> <li>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</li> </ul>                               |   |   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 14, Problem solving, Lessons 3 and 4</li> <li>Textbook 6C – Unit 15, Statistics, Lessons 8 and 9</li> </ul> |
| Number – fractions (including decimals and percentages) | <ul style="list-style-type: none"> <li>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 8, Fractions (1), Lesson 5</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 9, Fractions (2), Lessons 2–11</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 4, Fractions (1), Lessons 1, 2, 4 and 5</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Compare and order fractions, including fractions <math>&gt; 1</math>.</li> </ul>  |   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 8, Fractions (1), Lesson 6</li> </ul>     | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 4, Fractions (1), Lessons 2–5</li> <li>Textbook 6B – Unit 8, Percentages, Lesson 8</li> </ul>               |
|   | <ul style="list-style-type: none"> <li>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 9, Fractions (2), Lessons 4–12</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 4, Fractions (1), Lessons 6–11</li> <li>Textbook 6A – Unit 5, Fractions (2), Lesson 7</li> </ul>            |
|   | <ul style="list-style-type: none"> <li>Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, <math>\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}</math>).</li> </ul> |   |   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 5, Fractions (2), Lessons 2, 3 and 7</li> <li>Textbook 6B – Unit 8, Percentages, Lesson 3</li> </ul>        |
|   | <ul style="list-style-type: none"> <li>Divide proper fractions by whole numbers (for example, <math>\frac{1}{3} \div 2 = \frac{1}{6}</math>).</li> </ul>   |   |   | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 5, Fractions (2), Lessons 4–6</li> </ul>  |

| National curriculum programmes of study<br>Year 6 |  | Power Maths   |  |   |
|---|--|---|--|---|
| Domain  | Pupils should be taught to:  | Year 4  | Year 5   | Year 6  |
|   | <ul style="list-style-type: none"> <li>Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375) for a simple fraction (for example, <math>\frac{3}{8}</math>).</li> </ul>        |   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 8, Fractions (1), Lesson 8</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 7, Decimals, Lessons 3–5 and 8</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4B – Unit 10, Decimals (1), Lessons 4, 5, 9 and 10</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 5 and 6</li> <li>Textbook 5C – Unit 12, Decimals, Lessons 12–15</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 7, Decimals, Lessons 1–3</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Multiply one-digit numbers with up to two decimal places by whole numbers.</li> </ul>   |   |  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 7, Decimals, Lessons 6 and 7</li> <li>Textbook 6B – Unit 8, Percentages, Lesson 4</li> </ul>          |
|   | <ul style="list-style-type: none"> <li>Use written division methods in cases where the answer has up to two decimal places.</li> </ul>   |   |  | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 5, Fractions (2), Lessons 8 and 9</li> <li>Textbook 6B – Unit 7, Decimals, Lessons 5 and 9</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve problems which require answers to be rounded to specified degrees of accuracy.</li> </ul>   |   |  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 7, Decimals, Lessons 8 and 9</li> <li>Textbook 6B – Unit 8, Percentages, Lesson 9</li> </ul>          |
|   | <ul style="list-style-type: none"> <li>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5B – Unit 11, Decimals and percentages, Lessons 11 and 12</li> </ul>   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 8, Percentages, Lessons 1–9</li> <li>Textbook 6C – Unit 14, Problem solving, Lessons 6–8</li> </ul>   |

| National curriculum programmes of study<br>Year 6 |   | Power Maths |   |   |
|---|---|-------------|---|---|
| Domain  | Pupils should be taught to:   | Year 4      | Year 5  | Year 6  |
| Ratio and proportion                              | <ul style="list-style-type: none"> <li>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</li> </ul>   |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 12, Ratio and proportion, Lessons 1–4, 8 and 9</li> <li>Textbook 6A – Unit 14, Problem solving, Lesson 9</li> </ul>                                     |
|   | <ul style="list-style-type: none"> <li>Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.</li> </ul> |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 8, Percentages, Lessons 1–5.</li> <li>Textbook 6C – Unit 14, Problem solving, Lesson 8.</li> <li>Textbook 6C – Unit 15, Statistics, Lesson 8</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Solve problems involving similar shapes where the scale factor is known or can be found.</li> </ul>  |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 12, Ratio and proportion, Lessons 5–7</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</li> </ul>   |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 12, Ratio and proportion, Lessons 1–4, 8 and 9</li> <li>Textbook 6C – Unit 14, Problem solving, Lesson 9</li> </ul>                                     |
| Algebra   | <ul style="list-style-type: none"> <li>Use simple formulae.</li> </ul>  |             | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 6, Measure – area and perimeter, Lessons 5 and 6</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 9, Algebra, Lessons 1, 2 and 6</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Generate and describe linear number sequences.</li> </ul>  |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 9, Algebra, Lessons 1–5</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Express missing number problems algebraically.</li> </ul>  |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 9, Algebra, Lessons 4, 5 and 7–9</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Find pairs of numbers that satisfy an equation with two unknowns.</li> </ul>   |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 9, Algebra, Lessons 10 and 11</li> </ul>  |

| National curriculum programmes of study<br>Year 6 |  | Power Maths   |  |  |
|---|--|---|--|--|
| Domain  | Pupils should be taught to:  | Year 4  | Year 5   | Year 6   |
|   | <ul style="list-style-type: none"> <li>Enumerate possibilities of combinations of two variables.</li> </ul>  |   |  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 9, Algebra, Lessons 6, 10 and 11</li> </ul>  |
| Measurement                                       | <ul style="list-style-type: none"> <li>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 12, Money, Lessons 6–9</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lesson 10</li> </ul>               | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 10, Measure – imperial and metric measures, Lesson 3</li> <li>Textbook 6C – Unit 14, Problem solving, Lesson 10</li> </ul>                   |
|   | <ul style="list-style-type: none"> <li>Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</li> </ul> |   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 16, Measure – converting units, Lessons 1–4</li> </ul>             | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 10, Measure – imperial and metric measures, Lessons 1, 2 and 5</li> <li>Textbook 6C – Unit 14, Problem solving, Lessons 10 and 11</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Convert between miles and kilometres.</li> </ul>  |   |  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 10, Measure – imperial and metric measures, Lesson 4</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Recognise that shapes with the same areas can have different perimeters and vice versa.</li> </ul>  |   |  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 11, Measure – perimeter, area and volume, Lessons 1–3 and 9</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Recognise when it is possible to use formulae for area and volume of shapes.</li> </ul>   |   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 6, Measure – area and perimeter, Lessons 5 and 6 (area)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 11, Measure – perimeter, area and volume, Lessons 4, 10 and 11</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Calculate the area of parallelograms and triangles.</li> </ul>  |   |  | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 11, Measure – perimeter, area and volume, Lessons 4–8</li> </ul>   |
|   |  |   |  |  |

| National curriculum programmes of study<br>Year 6 |   | Power Maths |   |  |
|---|---|-------------|---|--|
| Domain  | Pupils should be taught to:   | Year 4      | Year 5  | Year 6   |
|   | <ul style="list-style-type: none"> <li>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (<math>\text{cm}^3</math>) and cubic metres (<math>\text{m}^3</math>), and extending to other units (for example, <math>\text{mm}^3</math> and <math>\text{km}^3</math>).</li> </ul> |             |   | <ul style="list-style-type: none"> <li>Textbook 6B – Unit 11, Measure – perimeter, area and volume, Lessons 10 and 11</li> </ul>   |
| Geometry – properties of shapes                   | <ul style="list-style-type: none"> <li>Draw 2D shapes using given dimensions and angles.</li> </ul>   |             | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 14, Geometry – properties of shapes (2), Lessons 2–4</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lessons 1 and 2</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Recognise, describe and build simple 3D shapes, including making nets.</li> </ul>  |             |   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lessons 11 and 12</li> </ul>  |
|   | <ul style="list-style-type: none"> <li>Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.</li> </ul>   |             | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 14, Geometry – properties of shapes (2), Lesson 4</li> </ul>    | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lessons 3–7</li> <li>Textbook 6C – Unit 14, Problem solving, Lessons 13 and 14</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Illustrate and name parts of circles, including radius, diameter and circumference, and know that the diameter is twice the radius.</li> </ul>   |             |   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lessons 9 and 10</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</li> </ul>   |             | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 13, Geometry – properties of shapes (1), Lesson 5–7</li> </ul>  | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 13, Geometry – properties of shapes, Lesson 8</li> <li>Textbook 6C – Unit 14, Problem solving, Lessons 13 and 14</li> </ul>    |

| National curriculum programmes of study<br>Year 6 |   | Power Maths   |   |   |
|---|---|---|---|---|
| Domain  | Pupils should be taught to:   | Year 4  | Year 5  | Year 6  |
| Geometry – position and direction                 | <ul style="list-style-type: none"> <li>Describe positions on the full coordinate grid (all four quadrants).</li> </ul>                    |   | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 15, Geometry – position and direction, Lesson 2 (first quadrant)</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 6, Geometry – position and direction, Lessons 1 and 2</li> <li>Textbook 6C – Unit 14, Problem solving, Lesson 12</li> </ul> |
|   | <ul style="list-style-type: none"> <li>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 4C – Unit 16, Geometry – position and direction, Lessons 5 and 6</li> </ul> | <ul style="list-style-type: none"> <li>Textbook 5C – Unit 15, Geometry – position and direction, Lessons 2–4</li> </ul>               | <ul style="list-style-type: none"> <li>Textbook 6A – Unit 6, Geometry – position and direction, Lessons 3 and 4</li> </ul>  |
| Statistics  | <ul style="list-style-type: none"> <li>Interpret and construct pie charts and line graphs and use these to solve problems.</li> </ul>     |   | <ul style="list-style-type: none"> <li>Textbook 5A – Unit 4, Graphs and tables, Lessons 3–5 (line graphs)</li> </ul>                  | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 15, Statistics, Lessons 4–10</li> </ul>   |
|   | <ul style="list-style-type: none"> <li>Calculate and interpret the mean as an average.</li> </ul>   |   |   | <ul style="list-style-type: none"> <li>Textbook 6C – Unit 15, Statistics, Lessons 1–3</li> </ul>  |