

# Power Maths Year 5, yearly overview

Textbook	Strand	Unit		Number of lessons
Textbook A / Practice Workbook A  (Term 1)	Number – number and place value	1	Place value within 1,000,000 (1)	8
	Number – number and place value	2	Place value within 1,000,000 (2)	6
	Number – addition and subtraction	3	Addition and subtraction	12
	Number – multiplication and division	4	Multiplication and division (1)	10
	Number – fractions (including decimals and percentages)	5	Fractions (1)	8
	Number – fractions (including decimals and percentages)	6	Fractions (2)	11
Textbook B / Practice Workbook B  (Term 2)	Number – multiplication and division	7	Multiplication and division (2)	10
	Number – fractions (including decimals and percentages)	8	Fractions (3)	7
	Number – fractions (including decimals and percentages)	9	Decimals and percentages	15
	Measurement	10	Measure – perimeter and area	8
	Statistics	11	Graphs and tables	6
Textbook C / Practice Workbook C  (Term 3)	Geometry – properties of shapes	12	Geometry – properties of shapes	12
	Geometry – position and direction	13	Geometry – position and direction	6
	Number – fractions (including decimals and percentages)	14	Decimals	15
	Number – number and place value	15	Negative numbers	4
	Measurement	16	Measure – converting units	10
	Measurement	17	Measure – volume and capacity	3

## Power Maths Year 5, Textbook 5A (Term I) overview

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	1	Roman numerals	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	2	Numbers to 10,000	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	3	Numbers to 100,000	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	4	Numbers to 1,000,000	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	5	Read and write 5- and 6-digit numbers	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	6	Powers of 10	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	7	10/100/1,000/10,000/100,000 more or less	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	8	Partition numbers to 1,000,000	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	
Number – number and place value	Unit 2	Place value within 1,000,000 (2)	1	Number line to 1,000,000	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit	
Number – number and place value	Unit 2	Place value within 1,000,000 (2)	2	Compare and order numbers to 100,000	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit	
Number – number and place value	Unit 2	Place value within 1,000,000 (2)	3	Compare and order numbers to 1,000,000	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit	
Number – number and place value	Unit 2	Place value within 1,000,000 (2)	4	Round numbers to the nearest 100,000	Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	
Number – number and place value	Unit 2	Place value within 1,000,000 (2)	5	Round numbers to the nearest 10,000	Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	
Number – number and place value	Unit 2	Place value within 1,000,000 (2)	6	Round numbers to the nearest 10, 100 and 1,000	Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	
Number – addition and subtraction	Unit 3	Addition and subtraction	1	Mental strategies (addition)	Add and subtract numbers mentally with increasingly large numbers	
Number – addition and subtraction	Unit 3	Addition and subtraction	2	Mental strategies (subtraction)	Add and subtract numbers mentally with increasingly large numbers	
Number – addition and subtraction	Unit 3	Addition and subtraction	3	Add whole numbers with more than 4 digits (1)	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
Number – addition and subtraction	Unit 3	Addition and subtraction	4	Add whole numbers with more than 4 digits (2)	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – addition and subtraction	Unit 3	Addition and subtraction	5	Subtract whole numbers with more than 4 digits (1)	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
Number – addition and subtraction	Unit 3	Addition and subtraction	6	Subtract whole numbers with more than 4 digits (2)	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	
Number – addition and subtraction	Unit 3	Addition and subtraction	7	Round to check answers	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	
Number – addition and subtraction	Unit 3	Addition and subtraction	8	Inverse operations (addition and subtraction)	Estimate and use inverse operations to check answers to a calculation	
Number – addition and subtraction	Unit 3	Addition and subtraction	9	Multi-step addition and subtraction problems (1)	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
Number – addition and subtraction	Unit 3	Addition and subtraction	10	Multi-step addition and subtraction problems (2)	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
Number – addition and subtraction	Unit 3	Addition and subtraction	11	Solve missing number problems	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
Number – addition and subtraction	Unit 3	Addition and subtraction	12	Solve comparison problems	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
Number – multiplication and division	Unit 4	Multiplication and division (1)	1	Multiples	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	
Number – multiplication and division	Unit 4	Multiplication and division (1)	2	Common multiples	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	
Number – multiplication and division	Unit 4	Multiplication and division (1)	3	Factors	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	
Number – multiplication and division	Unit 4	Multiplication and division (1)	4	Common factors	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	
Number – multiplication and division	Unit 4	Multiplication and division (1)	5	Prime numbers	Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers	
Number – multiplication and division	Unit 4	Multiplication and division (1)	6	Square numbers	Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	
Number – multiplication and division	Unit 4	Multiplication and division (1)	7	Cube numbers	Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	
Number – multiplication and division	Unit 4	Multiplication and division (1)	8	Multiply by 10, 100 and 1,000	Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – multiplication and division	Unit 4	Multiplication and division (1)	9	Divide by 10, 100 and 1,000	Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	
Number – multiplication and division	Unit 4	Multiplication and division (1)	10	Multiples of 10, 100 and 1,000	Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	1	Equivalent fractions 1	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	2	Equivalent fractions 2 – unit and non-unit fractions	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	3	Equivalent fractions 3 – families of equivalent fractions	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	4	Improper fractions to mixed numbers	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	5	Mixed numbers to improper fractions	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	6	Compare fractions less than 1	Compare and order fractions whose denominators are all multiples of the same number	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	7	Order fractions less than 1	Compare and order fractions whose denominators are all multiples of the same number	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (1)	8	Compare and order fractions greater than 1	Compare and order fractions whose denominators are all multiples of the same number	
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	1	Add and subtract fractions	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	2	Add fractions within 1	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	3	Add fractions with total greater than 1	Add and subtract fractions with the same denominator and denominators that are multiples of the same number Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	4	Add to a mixed number	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	5	Add two mixed numbers	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	6	Subtract fractions within 1	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	7	Subtract from a mixed number	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	8	Subtract from a mixed number – breaking the whole	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	9	Subtract two mixed numbers	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	10	Solve fraction problems	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	11	Solve multi-step fraction problems	Add and subtract fractions with the same denominator and denominators that are multiples of the same number	

## Power Maths Year 5, Textbook 5B (Term 2) overview

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – multiplication and division	7	Multiplication and division (2)	1	Multiply a number up to 4 digits by a 1-digit number	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	
Number – multiplication and division	7	Multiplication and division (2)	2	Multiply 2-digit numbers (area model)	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	Multiply and divide numbers mentally drawing upon known facts
Number – multiplication and division	7	Multiplication and division (2)	3	Multiply 2-digit numbers	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	Multiply and divide numbers mentally drawing upon known facts
Number – multiplication and division	7	Multiplication and division (2)	4	Multiply a 3-digit number by a 2-digit number	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	
Number – multiplication and division	7	Multiplication and division (2)	5	Multiply a 4-digit number by a 2-digit number	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	
Number – multiplication and division	7	Multiplication and division (2)	6	Divide a number up to 4 digits by a 1-digit number (1)	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	
Number – multiplication and division	7	Multiplication and division (2)	7	Divide a number up to 4 digits by a 1-digit number (2)	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	
Number – multiplication and division	7	Multiplication and division (2)	8	Divide with remainders	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	
Number – multiplication and division	7	Multiplication and division (2)	9	Efficient division	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	
Number – multiplication and division	7	Multiplication and division (2)	10	Solve problems with multiplication and division	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	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
Number – fractions (including decimals and percentages)	8	Fractions (3)	1	Multiply unit fractions by an integer	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	8	Fractions (3)	2	Multiply non-unit fractions by an integer	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fractions (including decimals and percentages)	8	Fractions (3)	3	Multiply mixed numbers by integers (1)	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	8	Fractions (3)	4	Multiply mixed numbers by integers (2)	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	8	Fractions (3)	5	Fraction of an amount	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
Number – fractions (including decimals and percentages)	8	Fractions (3)	6	Finding the whole	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
Number – fractions (including decimals and percentages)	8	Fractions (3)	7	Using fractions as operators	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
Number – fractions (including decimals and percentages)	9	Decimals and percentages	1	Write decimals up to 2 decimal places – less than 1	Read, write, order and compare numbers with up to three decimal places	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	2	Write decimals up to 2 decimal places – greater than 1	Read, write, order and compare numbers with up to three decimal places	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	3	Equivalent fractions and decimals – tenths	Read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$ ]	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	4	Equivalent fractions and decimals – hundredths	Read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$ ]	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	5	Equivalent fractions and decimals	Read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$ ]	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	6	Thousandths as fractions	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	7	Thousandths as decimals	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fractions (including decimals and percentages)	9	Decimals and percentages	8	Thousandths on a place value grid	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	9	Compare and order decimals – same number of decimal places	Read, write, order and compare numbers with up to three decimal places	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	10	Compare and order any decimals with up to 3 decimal places	Read, write, order and compare numbers with up to three decimal places	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	11	Round to the nearest whole number	Round decimals with two decimal places to the nearest whole number and to one decimal place	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	12	Round to one decimal place	Round decimals with two decimal places to the nearest whole number and to one decimal place	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	13	Understand percentages	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	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	14	Percentages as fractions and decimals	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	
Number – fractions (including decimals and percentages)	9	Decimals and percentages	15	Equivalent fractions, decimals and percentages	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	Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{5}$ , $\frac{2}{5}$ , $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25
Measurement	10	Measure – perimeter and area	1	Perimeter of rectangles	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	
Measurement	10	Measure – perimeter and area	2	Perimeter of rectilinear shapes (1)	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	
Measurement	10	Measure – perimeter and area	3	Perimeter of rectilinear shapes (2)	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	
Measurement	10	Measure – perimeter and area	4	Perimeter of polygons	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	
Measurement	10	Measure – perimeter and area	5	Area of rectangles (1)	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	



Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Measurement	10	Measure – perimeter and area	6	Area of rectangles (2)	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	
Measurement	10	Measure – perimeter and area	7	Area of compound shapes	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	
Measurement	10	Measure – perimeter and area	8	Estimate area	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	
Statistics	11	Graphs and tables	1	Draw line graphs	Solve comparison, sum and difference problems using information presented in a line graph	
Statistics	11	Graphs and tables	2	Read and interpret line graphs (1)	Solve comparison, sum and difference problems using information presented in a line graph	
Statistics	11	Graphs and tables	3	Read and interpret line graphs (2)	Solve comparison, sum and difference problems using information presented in a line graph	
Statistics	11	Graphs and tables	4	Read and interpret tables	Complete, read and interpret information in tables, including timetables	
Statistics	11	Graphs and tables	5	Two-way tables	Complete, read and interpret information in tables, including timetables	
Statistics	11	Graphs and tables	6	Timetables	Complete, read and interpret information in tables, including timetables	

## Power Maths Year 5, Textbook 5C (Term 3) overview

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Geometry – properties of shapes	12	Geometry – properties of shapes	1	Understand and use degrees	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	Identify: – angles at a point and one whole turn (total 360°) – angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) – other multiples of 90°
Geometry – properties of shapes	12	Geometry – properties of shapes	2	Measure acute angles	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	
Geometry – properties of shapes	12	Geometry – properties of shapes	3	Measure angles up to 180°	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles	Draw given angles, and measure them in degrees (°)
Geometry – properties of shapes	12	Geometry – properties of shapes	4	Draw lines and angles accurately	Draw given angles, and measure them in degrees (°)	
Geometry – properties of shapes	12	Geometry – properties of shapes	5	Calculate angles around a point	Identify: – angles at a point and one whole turn (total 360°) – angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) – other multiples of 90°	
Geometry – properties of shapes	12	Geometry – properties of shapes	6	Calculate angles on a straight line	Identify: – angles at a point and one whole turn (total 360°) – angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) – other multiples of 90°	
Geometry – properties of shapes	12	Geometry – properties of shapes	7	Lengths and angles in shapes	Use the properties of rectangles to deduce related facts and find missing lengths and angles	
Geometry – properties of shapes	12	Geometry – properties of shapes	8	Regular and irregular polygons	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
Geometry – properties of shapes	12	Geometry – properties of shapes	9	Parallel lines	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines (Year 3)	
Geometry – properties of shapes	12	Geometry – properties of shapes	10	Perpendicular lines	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines (Year 3)	
Geometry – properties of shapes	12	Geometry – properties of shapes	11	Investigate lines	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines (Year 3)	
Geometry – properties of shapes	12	Geometry – properties of shapes	12	3D shapes	Identify 3D shapes, including cubes and other cuboids, from 2D representations	
Geometry – position and direction	13	Geometry – position and direction	1	Read and plot coordinates	Describe positions on a 2D grid as coordinates in the first quadrant (Year 4)	Plot specified points and draw sides to complete a given polygon (Year 4)
Geometry – position and direction	13	Geometry – position and direction	2	Problem solving with coordinates	Describe positions on a 2D grid as coordinates in the first quadrant (Year 4)	Plot specified points and draw sides to complete a given polygon (Year 4)
Geometry – position and direction	13	Geometry – position and direction	3	Translate shapes	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	
Geometry – position and direction	13	Geometry – position and direction	4	Translate points	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	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Geometry – position and direction	13	Geometry – position and direction	5	Reflection	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	
Geometry – position and direction	13	Geometry – position and direction	6	Reflection in horizontal and vertical lines	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	
Number – fractions (including decimals and percentages)	14	Decimals	1	Add and subtract decimals within 1 (1)	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	2	Add and subtract decimals within 1 (2)	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	3	Complements to 1	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	4	Add and subtract decimals across 1	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	5	Add decimals with the same number of decimal places	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	6	Subtract decimals with the same number of decimal places	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	7	Add decimals with a different number of decimal places	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	8	Subtract decimals with a different number of decimal places	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	9	Problem solving with decimals (1)	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	10	Problem solving with decimals (2)	Solve problems involving number up to three decimal places	
Number – fractions (including decimals and percentages)	14	Decimals	11	Decimal sequences	Read, write, order and compare numbers with up to three decimal places	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fractions (including decimals and percentages)	14	Decimals	12	Multiply by 10	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Solve problems involving number up to three decimal places
Number – fractions (including decimals and percentages)	14	Decimals	13	Multiply by 10, 100 and 1,000	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Solve problems involving number up to three decimal places
Number – fractions (including decimals and percentages)	14	Decimals	14	Divide by 10	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Solve problems involving number up to three decimal places
Number – fractions (including decimals and percentages)	14	Decimals	15	Divide by 10, 100 and 1,000	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Solve problems involving number up to three decimal places
Number – number and place value	15	Negative numbers	1	Understand negative numbers	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	
Number – number and place value	15	Negative numbers	2	Count through zero	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	
Number – number and place value	15	Negative numbers	3	Compare and order negative numbers	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	
Number – number and place value	15	Negative numbers	4	Find the difference	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	
Measurement	16	Measure – converting units	1	Kilograms and kilometres	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	
Measurement	16	Measure – converting units	2	Millimetres and millilitres	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	
Measurement	16	Measure – converting units	3	Convert units of length	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	
Measurement	16	Measure – converting units	4	Imperial units of length	Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	
Measurement	16	Measure – converting units	5	Imperial units of mass	Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Measurement	16	Measure – converting units	6	Imperial units of capacity	Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	
Measurement	16	Measure – converting units	7	Convert units of time	Solve problems involving converting between units of time	
Measurement	16	Measure – converting units	8	Timetables – calculating	Solve problems involving converting between units of time	
Measurement	16	Measure – converting units	9	Problem solving – units of measure (1)	Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling	
Measurement	16	Measure – converting units	10	Problem solving – units of measure (2)	Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling	
Measurement	17	Measure – volume	1	Cubic centimetres	Estimate volume [for example, using 1 cm <sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]	
Measurement	17	Measure – volume	2	Compare volumes	Estimate volume [for example, using 1 cm <sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]	
Measurement	17	Measure – volume	3	Estimate volume	Estimate volume [for example, using 1 cm <sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]	

# Power Maths Year 6, yearly overview

Textbook	Strand	Unit		Number of lessons
Textbook A / Practice Workbook A  (Term 1)	Number – number and place value	1	Place value within 10,000,000	8
	Number – addition, subtraction, multiplication and division	2	Four operations (1)	8
	Number – addition, subtraction, multiplication and division	3	Four operations (2)	12
	Number - fractions	4	Fractions (1)	9
	Number - fractions	5	Fractions (2)	9
	Measurement	6	Measure – imperial and metric measures	5
Textbook B / Practice Workbook B  (Term 2)	Ratio and proportion	7	Ratio and proportion	9
	Algebra	8	Algebra	11
	Number - fractions (including decimals and percentages)	9	Decimals	9
	Number - fractions (including decimals and percentages)	10	Percentages	8
	Measurement	11	Measure – perimeter, area and volume	11
Textbook C / Practice Workbook C  (Term 3)	Statistics	12	Statistics	11
	Geometry – properties of shapes	13	Geometry – properties of shapes	12
	Geometry – position and direction	14	Geometry – position and direction	5
	Number – addition, subtraction, multiplication and division	15	Problem solving	14

## Power Maths Year 6, Textbook 6A (Term I) overview

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – number and place value	Unit 1	Place value within 10,000,000	1	Numbers to 1,000,000	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	Solve number and practical problems
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	2	Numbers to 10,000,000	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	Solve number and practical problems
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	3	Partition numbers to 10,000,000	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	Solve number and practical problems
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	4	Powers of 10	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	Solve number and practical problems
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	5	Number line to 10,000,000	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	Solve number and practical problems
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	6	Compare and order any number	Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	Solve number and practical problems
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	7	Round any number	Round any whole number to a required degree of accuracy	
Number – number and place value	Unit 1	Place value within 1,000,000 (1)	8	Negative numbers	Use negative numbers in context, and calculate intervals across zero	
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	1	Add integers	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	2	Subtract integers	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	3	Problem solving – addition and subtraction	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	4	Common factors	Identify common factors, common multiples and prime numbers	
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	5	Common multiples	Identify common factors, common multiples and prime numbers	
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	6	Rules of divisibility	Identify common factors, common multiples and prime numbers	Use their knowledge of the order of operations to carry out calculations involving the four operations
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	7	Primes to 100	Identify common factors, common multiples and prime numbers	
Number – addition, subtraction, multiplication and division	Unit 2	Four operations (1)	8	Squares and cubes	Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) (year 5)	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – addition and subtraction	Unit 3	Four operations (2)	1	Multiply by a 1-digit number	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication	
Number – addition and subtraction	Unit 3	Addition and subtraction	2	Multiply up to a 4-digit number by a 2-digit number	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication	
Number – addition and subtraction	Unit 3	Addition and subtraction	3	Short division	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	
Number – addition and subtraction	Unit 3	Addition and subtraction	4	Division using factors	Identify common factors, common multiples and prime numbers	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
Number – addition and subtraction	Unit 3	Addition and subtraction	5	Divide a 3-digit number by 2-digit (long division)	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	
Number – addition and subtraction	Unit 3	Addition and subtraction	6	Divide a 4-digit number by 2-digit (long division)	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	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
Number – addition and subtraction	Unit 3	Addition and subtraction	7	Long division with remainders	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	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
Number – addition and subtraction	Unit 3	Addition and subtraction	8	Order of operations	Use their knowledge of the order of operations to carry out calculations involving the four operations	
Number – addition and subtraction	Unit 3	Addition and subtraction	9	Brackets	Use their knowledge of the order of operations to carry out calculations involving the four operations	
Number – addition and subtraction	Unit 3	Addition and subtraction	10	Mental calculations (1)	Perform mental calculations, including with mixed operations and large numbers	
Number – addition and subtraction	Unit 3	Addition and subtraction	11	Mental calculations (2)	Perform mental calculations, including with mixed operations and large numbers	
Number – addition and subtraction	Unit 3	Addition and subtraction	12	Reason from known facts	Use their knowledge of the order of operations to carry out calculations involving the four operations	Solve problems involving addition, subtraction, multiplication and division
Number – fraction	Unit 4	Fractions (1)	1	Equivalent fractions and simplifying	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination	
Number – fraction	Unit 4	Fractions (1)	2	Equivalent fractions on a number line	Compare and order fractions, including fractions $> 1$	
Number – fraction	Unit 4	Fractions (1)	3	Compare and order fractions (	Compare and order fractions, including fractions $> 1$	



Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fraction	Unit 4	Fractions (1)	4	Add and subtract simple fractions	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
Number – fraction	Unit 4	Fractions (1)	5	Add and subtract any two fractions	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
Number – fraction	Unit 4	Fractions (1)	6	Add mixed numbers	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
Number – fraction	Unit 4	Fractions (1)	7	Subtract mixed numbers	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
Number – fraction	Unit 4	Fractions (1)	8	Multi-step problems	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
Number – fraction	Unit 4	Fractions (1)	9	Problem solving - add and subtract fractions	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	1	Multiply fractions by integers	Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	2	Multiply fractions by fractions (1)	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ]	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	3	Multiply fractions by fractions (2)	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ]	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	4	Divide a fraction by an integer (1)	Divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$ ]	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	5	Divide a fraction by an integer (2)	Divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$ ]	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	6	Divide a fraction by an integer (2)	Divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$ ]	
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	7	Mixed questions with fractions	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ]
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	8	Fraction of an amount	Use written division methods in cases where the answer has up to two decimal places	

Strand	Unit		Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fractions (including decimals and percentages)	Unit 5	Fractions (2)	9	Fraction of an amount – find the whole	Use written division methods in cases where the answer has up to two decimal places	
Measurement	Unit 6	Measure – imperial and metric measures	1	Metric measures	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	
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	2	Convert metric measures	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	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	3	Calculate with metric measures	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate	
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	4	Miles and kilometres	Convert between miles and kilometres	
Number – fractions (including decimals and percentages)	Unit 6	Fractions (2)	5	Imperial measures	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	

## Power Maths Year 6, Textbook 6B (Term 2) overview

Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Ratio and proportion	7	Ratio and proportion	1	Use ratio language	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	
Ratio and proportion	7	Ratio and proportion	2	Introduce the ratio symbol	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	
Ratio and proportion	7	Ratio and proportion	3	Use ratio	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	
Ratio and proportion	7	Ratio and proportion	4	Scale drawing	Solve problems involving similar shapes where the scale factor is known or can be found	
Ratio and proportion	7	Ratio and proportion	5	Scale factors	Solve problems involving similar shapes where the scale factor is known or can be found	
Ratio and proportion	7	Ratio and proportion	6	Similar shapes	Solve problems involving similar shapes where the scale factor is known or can be found	
Ratio and proportion	7	Ratio and proportion	7	Ratio problems	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	
Ratio and proportion	7	Ratio and proportion	8	Problem solving – ratio and proportion (1)	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
Ratio and proportion	7	Ratio and proportion	9	Problem solving – ratio and proportion (2)	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
Algebra	8	Algebra	1	Find a rule – one step	Generate and describe linear number sequences	
Algebra	8	Algebra	2	Find a rule – two steps	Generate and describe linear number sequences	
Algebra	8	Algebra	3	Form expressions	Generate and describe linear number sequences	
Algebra	8	Algebra	4	Substitution (1)	Express missing number problems algebraically	Generate and describe linear number sequences
Algebra	8	Algebra	5	Substitution (2)	Express missing number problems algebraically	Generate and describe linear number sequences
Algebra	8	Algebra	6	Formulae	Use simple formulae	
Algebra	8	Algebra	7	Form and solve equations	Express missing number problems algebraically	
Algebra	8	Algebra	8	Solve one-step equations	Express missing number problems algebraically	
Algebra	8	Algebra	9	Solve two-step equations	Express missing number problems algebraically	
Algebra	8	Algebra	10	Find pairs of values	Find pairs of numbers that satisfy an equation with two unknowns	
Algebra	8	Algebra	11	Solve problems with two unknowns	Enumerate possibilities of combinations of two variables	Find pairs of numbers that satisfy an equation with two unknowns

Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fractions (including decimals and percentages)	9	Decimals	1	Place value to 3 decimal places	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	Solve problems which require answers to be rounded to specified degrees of accuracy
Number – fractions (including decimals and percentages)	9	Decimals	2	Round decimals	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	Solve problems which require answers to be rounded to specified degrees of accuracy
Number – fractions (including decimals and percentages)	9	Decimals	3	Add and subtract decimals	Solve problems which require answers to be rounded to specified degrees of accuracy	
Number – fractions (including decimals and percentages)	9	Decimals	4	Multiply by 10, 100 and 1,000	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	
Number – fractions (including decimals and percentages)	9	Decimals	5	Divide by 10, 100 and 1,000	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	
Number – fractions (including decimals and percentages)	9	Decimals	6	Multiply decimals by integers	Multiply one-digit numbers with up to two decimal places by whole numbers	
Number – fractions (including decimals and percentages)	9	Decimals	7	Divide decimals by integers	Use written division methods in cases where the answer has up to two decimal places	Solve problems which require answers to be rounded to specified degrees of accuracy
Number – fractions (including decimals and percentages)	9	Decimals	8	Fractions to decimals	Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$ ]	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
Number – fractions (including decimals and percentages)	9	Decimals	9	Fractions as division	Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$ ]	
Number – fractions (including decimals and percentages)	10	Percentages	1	Understand percentages	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	
Number – fractions (including decimals and percentages)	10	Percentages	2	Fractions to percentages	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	

Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – fractions (including decimals and percentages)	10	Percentages	3	Equivalent fractions, decimals and percentages	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	
Number – fractions (including decimals and percentages)	10	Percentages	4	Order fractions, decimals and percentages	Compare and order fractions, including fractions $> 1$	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Number – fractions (including decimals and percentages)	10	Percentages	5	Simple percentage of an amount	Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Number – fractions (including decimals and percentages)	10	Percentages	6	Percentage of an amount – 1%	Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Number – fractions (including decimals and percentages)	10	Percentages	7	Percentages of an amount	Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Number – fractions (including decimals and percentages)	10	Percentages	8	Percentages (missing values)	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	Multiply one-digit numbers with up to two decimal places by whole numbers
Measurement	11	Measure – perimeter, area and volume	1	Shapes – same area	Recognise that shapes with the same areas can have different perimeters and vice versa	
Measurement	11	Measure – perimeter, area and volume	2	Area and perimeter	Recognise that shapes with the same areas can have different perimeters and vice versa	
Measurement	11	Measure – perimeter, area and volume	3	Area and perimeter – missing lengths	Recognise that shapes with the same areas can have different perimeters and vice versa	
Measurement	11	Measure – perimeter, area and volume	4	Area of a triangle – counting squares	Calculate the area of parallelograms and triangles	
Measurement	11	Measure – perimeter, area and volume	5	Area of a right-angled triangle	Calculate the area of parallelograms and triangles	
Measurement	11	Measure – perimeter, area and volume	6	Area of any triangle	Calculate the area of parallelograms and triangles	
Measurement	11	Measure – perimeter, area and volume	7	Area of a parallelogram	Recognise when it is possible to use formulae for area and volume of shapes	Calculate the area of parallelograms and triangles
Measurement	11	Measure – perimeter, area and volume	8	Problem solving – area	Calculate the area of parallelograms and triangles	
Measurement	11	Measure – perimeter, area and volume	9	Problem solving – perimeter	Recognise that shapes with the same areas can have different perimeters and vice versa	

Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Measurement	11	Measure – perimeter, area and volume	10	Volume – count cubes	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units [for example, mm <sup>3</sup> and km <sup>3</sup> ]	Recognise when it is possible to use formulae for area and volume of shapes
Measurement	11	Measure – perimeter, area and volume	11	Volume of a cuboid	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units [for example, mm <sup>3</sup> and km <sup>3</sup> ]	Recognise when it is possible to use formulae for area and volume of shapes

## Power Maths Year 6, Textbook 6C (Term 3) overview

Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Statistics	12	Statistics	1	Interpret line graphs	Interpret and construct pie charts and line graphs and use these to solve problems	
Statistics	12	Statistics	2	Draw line graphs	Interpret and construct pie charts and line graphs and use these to solve problems	
Statistics	12	Statistics	3	Advanced bar charts	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Statistics	12	Statistics	4	Understand and complete pie charts	Interpret and construct pie charts and line graphs and use these to solve problems	
Statistics	12	Statistics	5	Read and interpret pie charts	Interpret and construct pie charts and line graphs and use these to solve problems	
Statistics	12	Statistics	6	Pie charts and fractions (1)	Interpret and construct pie charts and line graphs and use these to solve problems	
Statistics	12	Statistics	7	Pie charts and fractions (2)	Interpret and construct pie charts and line graphs and use these to solve problems	
Statistics	12	Statistics	8	Pie charts and percentages	Interpret and construct pie charts and line graphs and use these to solve problems	Pupils connect their work on angles, fractions and percentages to the interpretation of pie charts [non-stat]
Statistics	12	Statistics	9	Introduction to the mean	Calculate and interpret the mean as an average	
Statistics	12	Statistics	10	Calculate the mean	Calculate and interpret the mean as an average	
Statistics	12	Statistics	11	Problem solving – mean	Calculate and interpret the mean as an average	
Geometry – properties of shapes	13	Geometry – properties of shapes	1	Measure and classify angles	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	
Geometry – properties of shapes	13	Geometry – properties of shapes	2	Vertically opposite angles	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	
Geometry – properties of shapes	13	Geometry – properties of shapes	3	Angles in a triangle	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	Draw 2D shapes using given dimensions and angles

Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Geometry – properties of shapes	13	Geometry – properties of shapes	4	Angles in a triangle – missing angles	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	
Geometry – properties of shapes	13	Geometry – properties of shapes	5	Angles in a triangle – special cases	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	
Geometry – properties of shapes	13	Geometry – properties of shapes	6	Angles in quadrilaterals	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	
Geometry – properties of shapes	13	Geometry – properties of shapes	7	Angles in polygons	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	
Geometry – properties of shapes	13	Geometry – properties of shapes	8	Circles	Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	
Geometry – properties of shapes	13	Geometry – properties of shapes	9	Parts of a circle	Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	
Geometry – properties of shapes	13	Geometry – properties of shapes	10	Draw shapes accurately	Draw 2D shapes using given dimensions and angles	
Geometry – properties of shapes	13	Geometry – properties of shapes	11	Nets of 3D shapes (1)	Recognise, describe and build simple 3D shapes, including making nets	
Geometry – properties of shapes	13	Geometry – properties of shapes	12	Nets of 3D shapes (2)	Recognise, describe and build simple 3D shapes, including making nets	
Geometry – position and direction	14	Geometry – position and direction	1	The first quadrant	Describe positions on the full coordinate grid (all four quadrants)	
Geometry – position and direction	14	Geometry – position and direction	2	Read and plot points in four quadrants	Describe positions on the full coordinate grid (all four quadrants)	
Geometry – position and direction	14	Geometry – position and direction	3	Translations	Draw and translate simple shapes on the coordinate plane, and reflect them in the axes	
Geometry – position and direction	14	Geometry – position and direction	4	Reflections	Draw and translate simple shapes on the coordinate plane, and reflect them in the axes	



Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Geometry – position and direction	14	Geometry – position and direction	5	Solve problems with coordinates	Describe positions on the full coordinate grid (all four quadrants)	Draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Number – addition, subtraction, multiplication and division	15	Problem solving	1	Problem solving – place value	Solve number and practical problems that involve all of the above	
Number – addition, subtraction, multiplication and division	15	Problem solving	2	Problem solving – negative numbers	Solve number and practical problems that involve all of the above	
Number – addition, subtraction, multiplication and division	15	Problem solving	3	Problem solving – addition and subtraction	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
Number – addition, subtraction, multiplication and division	15	Problem solving	4	Problem solving – four operations (1)	Solve problems involving addition, subtraction, multiplication and division	Use their knowledge of the order of operations to carry out calculations involving the four operations
Number – addition, subtraction, multiplication and division	15	Problem solving	5	Problem solving – four operations (2)	Solve problems involving addition, subtraction, multiplication and division	
Number – addition, subtraction, multiplication and division	15	Problem solving	6	Problem solving – fractions	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	
Number – addition, subtraction, multiplication and division	15	Problem solving	7	Problem solving – decimals	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	
Number – addition, subtraction, multiplication and division	15	Problem solving	8	Problem solving – percentages	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	
Number – addition, subtraction, multiplication and division	15	Problem solving	9	Problem solving – ratio and proportion	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
Number – addition, subtraction, multiplication and division	15	Problem solving	10	Problem solving – time (1)	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	

Strand	Unit	Unit title	Lesson number	Lesson title	NC Objective 1	NC Objective 2
Number – addition, subtraction, multiplication and division	15	Problem solving	11	Problem solving – time (2)	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	
Number – addition, subtraction, multiplication and division	15	Problem solving	12	Problem solving – position and direction	Describe positions on the full coordinate grid (all four quadrants)	
Number – addition, subtraction, multiplication and division	15	Problem solving	13	Problem solving – properties of shapes (1)	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
Number – addition, subtraction, multiplication and division	15	Problem solving	14	Problem solving – properties of shapes (2)	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons