Power Maths to National curriculum matching chart KS2

Year 3

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
Textbook 3A	Unit 1, Place value within 1,000	● Counting in 100s	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Identify, represent and estimate numbers using different representations. ● Read and write numbers up to 1,000 in numerals and in words.
		● Representing numbers to 1,000	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Identify, represent and estimate numbers using different representations. ● Read and write numbers up to 1,000 in numerals and in words.
			4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (three-digit number).
		● 100s, 10s and 1s (1)	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Identify, represent and estimate numbers using different representations. ● Read and write numbers up to 1,000 in numerals and in words.
			4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (three-digit number).
		● 100s, 10s and 1s (2)	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Identify, represent and estimate numbers using different representations. ● Read and write numbers up to 1,000 in numerals and in words.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (three-digit number).
		● The number line to 1,000 (1)	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Identify, represent and estimate numbers using different representations. ● Read and write numbers up to 1,000 in numerals and in words.
			4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (three-digit number). ● Identify, represent and estimate numbers using different representations.
		● The number line to 1,000 (2)	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Compare and order numbers up to 1,000. ● Read and write numbers up to 1,000 in numerals and in words.
			4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (three-digit number). ● Identify, represent and estimate numbers using different representations.
		● Finding 1, 10 and 100 more or less	3	Number – number and place value	● Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. ● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Identify, represent and estimate numbers using different representations.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Comparing numbers to 1,000 (1)	3	Number – number and place value	● Compare and order numbers up to 1,000. ● Identify, represent and estimate numbers using different representations. ● Read and write numbers up to 1,000 in numerals and in words.
		● Comparing numbers to 1,000 (2)	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Compare and order numbers up to 1,000. ● Solve number problems and practical problems involving these ideas.
		● Ordering numbers to 1,000	3	Number – number and place value	● Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ● Compare and order numbers up to 1,000. ● Read and write numbers up to 1,000 in numerals and in words.
		● Counting in 50s	3	Number – number and place value	● Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. ● Solve number problems and practical problems involving these ideas.
	Addition and subtraction (1)	● Adding and subtracting 100s	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds.
		● Adding and subtracting a 3-digit number and 1s	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds.
		● Adding a 3-digit number and 1s	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Subtracting 1s from a 3-digit number	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds.
		● Adding and subtracting a 3-digit number and 10s	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds.
		● Adding a 3-digit number and 10s	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds.
		● Subtracting 10s from a 3-digit number	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
		● Adding and subtracting a 3-digit and 2-digit number	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
			4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Adding a 3-digit and 2-digit number	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. ● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
			4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
		● Subtracting a 2-digit number from a 3-digit number	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. ● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
			4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
	Addition and subtraction (2)	● Addition and subtraction patterns	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. ● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
		● Adding two 3-digit numbers (1)	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
		● Adding two 3-digit numbers (2)	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. ● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
		● Subtracting a 3-digit number from a 3-digit number (1)	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Subtracting a 3-digit number from a 3-digit number (2)	3	Number – addition and subtraction	● Add and subtract numbers mentally, including: – a three-digit number and ones – a three-digit number and tens – a three-digit number and hundreds. ● Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. ● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
		● Estimating answers to additions and subtractions	3	Number – addition and subtraction	● Estimate the answer to a calculation and use inverse operations to check answers.
		● Checking strategies	3	Number – addition and subtraction	● Estimate the answer to a calculation and use inverse operations to check answers.
			4	Number – addition and subtraction	● Estimate and use inverse operations to check answers to a calculation.
		● Problem solving – addition and subtraction (1)	3	Number – addition and subtraction	● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
		● Problem solving – addition and subtraction (2)	3	Number – addition and subtraction	● Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
	Unit 4, Multiplication and division (1)	● Multiplication – equal grouping	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		● Multiplying by 3	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Dividing by 3	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		● 3 times-table	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12 (3, 4 and 8).

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Multiplying by 4	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		● Dividing by 4	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● 4 times-table	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12 (3, 4 and 8)
		● Multiplying by 8	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Dividing by 8	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		● 8 times-table	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12 (3, 4 and 8)

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Problem solving – multiplication and division (1)	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12 (3, 4 and 8)
		● Problem solving – multiplication and division (2)	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12 (3, 4 and 8)

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Understanding divisibility (1)	3	Number – multiplication and division	● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		● Understanding divisibility (2)	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		● Related facts – multiplication and division	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
Textbook 3B	Unit 5, Multiplication and division (2)	• Comparing multiplication and division statements (1)	3	Number – multiplication and division	• Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		• Related multiplication calculations	3	Number – multiplication and division	• 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.
		• Related multiplication and division calculations	3	Number – multiplication and division	• 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.
		• Comparing multiplication and division statements (2)	3	Number – multiplication and division	• 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.
			4	Number – multiplication and division	• Recall multiplication and division facts for multiplication tables up to 12 × 12 (3, 4 and 8)
		• Multiplying a 2-digit number by a 1-digit number (1)	3	Number – multiplication and division	• 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.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Multiplying a 2-digit number by a 1-digit number (2)	3	Number – multiplication and division	● 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.
		● Multiplying a 2-digit number by a 1-digit number (3)	3	Number – multiplication and division	● 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.
			4	Number – multiplication and division	● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
		● Dividing a 2-digit number by a 1-digit number (1)	3	Number – multiplication and division	● 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.
		● Dividing a 2-digit number by a 1-digit number (2)	3	Number – multiplication and division	● 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.
		● Dividing a 2-digit number by a 1-digit number (3)	3	Number – multiplication and division	● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● How many ways?	3	Number – multiplication and division	● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
		● Problem solving – mixed problems (1)	3	Number – multiplication and division	● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. ● 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.
		● Problem solving – mixed problems (2)	3	Number – multiplication and division	● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. ● 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.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Problem solving – mixed problems (3)	3	Number – multiplication and division	● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
	Unit 6, Money	● Pounds and pence	3	Measurement	● Add and subtract amounts of money to give change, using both £ and p in practical contexts.
		● Converting pounds and pence	3	Measurement	● Add and subtract amounts of money to give change, using both £ and p in practical contexts.
		● Adding money	3	Measurement	● Add and subtract amounts of money to give change, using both £ and p in practical contexts.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
		● Subtracting amounts of money	3	Measurement	● Add and subtract amounts of money to give change, using both £ and p in practical contexts.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
		● Problem solving – money	3	Measurement	● Add and subtract amounts of money to give change, using both £ and p in practical contexts.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
	Unit 7, Statistics	● Pictograms (1)	3	Statistics	● Interpret and present data using bar charts, pictograms and tables.
			4	Statistics	● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Pictograms (2)	3	Statistics	● 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.
			4	Statistics	● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
		● Bar charts (1)	3	Statistics	● Interpret and present data using bar charts, pictograms and tables.
			4	Statistics	● Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
		● Bar charts (2)	3	Statistics	● 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.
			4	Statistics	● Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
		● Tables	3	Statistics	● 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.
			4	Statistics	● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
	Unit 8, Length	● Measuring length (1)	3	Measurement	● Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Measuring length (2)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Equivalent lengths – metres and centimetres	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
			4	Measurement	• Convert between different units of measure (for example, kilometre to metre; hour to minute).
		• Equivalent lengths – centimetres and millimetres	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
			4	Measurement	• Convert between different units of measure (for example, kilometre to metre; hour to minute).
		• Comparing lengths	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
			4	Measurement	• Convert between different units of measure (for example, kilometre to metre; hour to minute).
		• Adding lengths	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Subtracting lengths	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Measuring the perimeter (1)	3	Measurement	• Measure the perimeter of simple 2D shapes.
			4	Measurement	• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
		• Measuring the perimeter (2)	3	Measurement	• Measure the perimeter of simple 2D shapes.
			4	Measurement	• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
		• Problem solving – length (1)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). • Measure the perimeter of simple 2D shapes.
		• Problem solving – length (2)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). • Measure the perimeter of simple 2D shapes.
	Unit 9, Fractions (1)	• Unit and non unit fractions	3	Number – fractions	• Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Making the whole	3	Number – fractions	● Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
		● Tenths (1)	3	Number – fractions	● 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.
		● Tenths (2)	3	Number – fractions	● 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.
		● Fractions as numbers (1)	3	Number – fractions	● Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ● Compare and order unit fractions, and fractions with the same denominators.
		● Fractions as numbers (2)	3	Number – fractions	● Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ● Compare and order unit fractions, and fractions with the same denominators.
		● Fractions as numbers (3)	3	Number – fractions	● Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ● Compare and order unit fractions, and fractions with the same denominators.
		● Fractions of a set of objects (1)	3	Number – fractions	● Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
		● Fractions of a set of objects (2)	3	Number – fractions	● Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
		● Fractions of a set of objects (3)	3	Number – fractions	● Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			4	Number – fractions	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
		● Problem solving – fractions	3	Number – fractions	● Solve problems that involve all of the above.
			4	Number – fractions	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
Textbook 3C	Unit 10, Fractions (2)	● Equivalent fractions (1)	3	Number – fractions	● Recognise and show, using diagrams, equivalent fractions with small denominators.
		● Equivalent fractions (2)	3	Number – fractions	● Recognise and show, using diagrams, equivalent fractions with small denominators. ● Compare and order unit fractions, and fractions with the same denominators.
		● Equivalent fractions (3)	3	Number – fractions	● Recognise and show, using diagrams, equivalent fractions with small denominators. ● Solve problems that involve all of the above.
		● Comparing fractions	3	Number – fractions	● Recognise and show, using diagrams, equivalent fractions with small denominators. ● Compare and order unit fractions, and fractions with the same denominators.
			4	Number – fractions	● Recognise and show, using diagrams, families of common equivalent fractions.
		● Comparing and ordering fractions	3	Number – fractions	● Compare and order unit fractions, and fractions with the same denominators.
			4	Number – fractions	● Recognise and show, using diagrams, families of common equivalent fractions.
		● Adding fractions	3	Number – fractions	● Add and subtract fractions with the same denominator within one whole (for example, $\frac{5}{7}+\frac{1}{7}=\frac{6}{7}$).
			4	Number – fractions (including decimals)	● Add and subtract fractions with the same denominator.
		● Subtracting fractions	3	Number – fractions	● Add and subtract fractions with the same denominator within one whole (for example, $\frac{5}{7}+\frac{1}{7}=\frac{6}{7}$).

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			4	Number – fractions (including decimals)	● Add and subtract fractions with the same denominator.
		● Problem solving – adding and subtracting fractions	3	Number – fractions	● Add and subtract fractions with the same denominator within one whole (for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) ● Solve problems that involve all of the above.
		● Problem solving – fractions of measures	3	Number – fractions	● Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. ● Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ● Solve problems that involve all of the above.
			4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
	Unit 11, Time	● Months and years	3	Measurement	● Know the number of seconds in a minute and the number of days in each month, year and leap year.
			4	Measurement	● Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
		● Hours in a day	3	Measurement	● Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. ● Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.
			4	Measurement	● Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Estimating time	3	Measurement	● Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.
		● Telling time to 5 minutes	3	Measurement	● Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.
		● Telling time to the minute (1)	3	Measurement	● 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.
		● Telling time to the minute (2)	3	Measurement	● 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.
		● Telling time to the minute (3)	3	Measurement	● Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. ● Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.
		● Finding the duration	3	Measurement	● 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.

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Comparing duration	3	Measurement	● Compare durations of events (for example to calculate the time taken by particular events or tasks). ● 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.
		● Finding start and end times	3	Measurement	● Compare durations of events (for example to calculate the time taken by particular events or tasks). ● 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.
		● Measuring time in seconds	3	Measurement	● Compare durations of events (for example to calculate the time taken by particular events or tasks). ● 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.
			4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute). ● Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
	Unit 12, Angles and properties of shapes	● Turns and angles	3	Geometry – properties of shapes	● Recognise angles as a property of shape or a description of a turn. ● Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
		● Right angles in shapes	3	Geometry – properties of shapes	● Recognise angles as a property of shape or a description of a turn. ● Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
		● Comparing angles	3	Geometry – properties of shapes	● Recognise angles as a property of shape or a description of a turn. ● Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
			4	Geometry – properties of shapes	● Identify acute and obtuse angles and compare and order angles up to two right angles by size.
		● Drawing accurately	3	Geometry – properties of shapes	● Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them. ● Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
		● Types of line (1)	3	Geometry – properties of shapes	● Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
		● Types of line (2)	3	Geometry – properties of shapes	● Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
			4	Geometry – properties of shapes	● Identify lines of symmetry in 2D shapes presented in different orientations.

Power Maths Year 3			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Recognising and describing 2D shapes	3	Geometry – properties of shapes	• Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.
			4	Geometry – properties of shapes	• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
		• Recognising and describing 3D shapes	3	Geometry – properties of shapes	• Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.
			4	Geometry – properties of shapes	• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
		• Constructing 3D shapes	3	Geometry – properties of shapes	• Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.
	Unit 13, Mass	• Measuring mass (1)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Measuring mass (2)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Measuring mass (3)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Comparing masses	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Adding and subtracting masses	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Problem solving – mass	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
	Unit 14, Capacity	• Measuring capacity (1)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).

***Power Maths* Year 3**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Measuring capacity (2)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Measuring capacity (3)	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Comparing capacities	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Adding and subtracting capacities	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
		• Problem solving – capacity	3	Measurement	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).

Year 4

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
Textbook 4A	Unit 1, Place value – 4-digit numbers (1)	• Numbers to 1,000	3	Number – number and place value	• Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • Read and write numbers up to 1,000 in numerals and in words.
			4	Number – number and place value	• Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (1,000).
		• Rounding to the nearest 10	4	Number – number and place value	• Round any number to the nearest 10, 100 or 1,000.
			5	Number – number and place value	• Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 (10).
			6	Number – number and place value	• Round any whole number to a required degree of accuracy (10).
		• Rounding to the nearest 100	4	Number – number and place value	• Round any number to the nearest 10, 100 or 1,000.
			5	Number – number and place value	• Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 (100).
			6	Number – number and place value	• Round any whole number to a required degree of accuracy (100).
		• Counting in 1,000s	4	Number – number and place value	• Count in multiples of 6, 7, 9, 25 and 1,000. • Identify, represent and estimate numbers using different representations.
		• Representing 4-digit numbers	4	Number – number and place value	• Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). • Identify, represent and estimate numbers using different representations.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – number and place value	● Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (1,000).
		● 1,000s, 100s, 10s and 1s	4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). ● Identify, represent and estimate numbers using different representations.
			6	Number – number and place value	● Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (1,000).
		● The number line to 10,000 (1)	4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). ● Identify, represent and estimate numbers using different representations.
			6	Number – number and place value	● Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (10,000).
		● The number line to 10,000 (2)	4	Number – number and place value	● Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). ● Order and compare numbers beyond 1,000. ● Identify, represent and estimate numbers using different representations.
			6	Number – number and place value	● Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (10,000).
		● Roman numerals to 100	3	Number – number and place value	● Identify, represent and estimate numbers using different representations.
			4	Number – number and place value	● 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.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			5	Number – number and place value	● Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals (100).
	Unit 2, Place value – 4-digit numbers (2)	● Finding 1,000 more or less	4	Number – number and place value	● Find 1,000 more or less than a given number.
			4	Number – addition and subtraction	● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
		● Comparing 4-digit numbers (1)	4	Number – number and place value	● Order and compare numbers beyond 1,000. ● Identify, represent and estimate numbers using different representations.
		● Comparing 4-digit numbers (2)	4	Number – number and place value	● Order and compare numbers beyond 1,000. ● Identify, represent and estimate numbers using different representations.
		● Ordering numbers to 10,000	4	Number – number and place value	● Order and compare numbers beyond 1,000. ● Identify, represent and estimate numbers using different representations.
		● Rounding to the nearest 1,000	4	Number – number and place value	● Round any number to the nearest 10, 100 or 1,000.
			5	Number – number and place value	● Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 (1,000).
			6	Number – number and place value	● Round any whole number to a required degree of accuracy.
		● Solving problems using rounding	4	Number – number and place value	● Round any number to the nearest 10, 100 or 1,000. ● Solve number and practical problems that involve all of the above and with increasingly large positive numbers.
		● Counting in 25s	4	Number – number and place value	● Count in multiples of 6, 7, 9, 25 and 1,000.
		● Negative numbers (1)	4	Number – number and place value	● Count backwards through zero to include negative numbers.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			5	Number – number and place value	● Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
		● Negative numbers (2)	4	Number – number and place value	● Count backwards through zero to include negative numbers.
			5	Number – number and place value	● Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
	Unit 3, Addition and subtraction	● Adding and subtracting 1s, 10s, 100s, 1,000s	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
			5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		● Adding two 4-digit numbers (1)	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
		● Adding two 4-digit numbers (2)	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
		● Adding two 4-digit numbers (3)	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
		● Subtracting two 4-digit numbers (1)	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
		● Subtracting two 4-digit numbers (2)	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
		● Subtracting two 4-digit numbers (3)	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
		● Subtracting two 4-digit numbers (4)	4	Number – addition and subtraction	● Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Equivalent difference	4	Number – number and place value	● Round any number to the nearest 10, 100 or 1,000.
			4	Number – addition and subtraction	● Estimate and use inverse operations to check answers to a calculation.
		● Estimating answers to additions and subtractions	4	Number – number and place value	● Round any number to the nearest 10, 100 or 1,000.
			4	Number – addition and subtraction	● Estimate and use inverse operations to check answers to a calculation.
			5	Number – addition and subtraction	● Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy (rounding).
		● Checking strategies	4	Number – addition and subtraction	● Estimate and use inverse operations to check answers to a calculation.
		● Problem solving – addition and subtraction (1)	4	Number – addition and subtraction	● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
			5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		● Problem solving – addition and subtraction (2)	4	Number – addition and subtraction	● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
			5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		● Problem solving – addition and subtraction (3)	4	Number – addition and subtraction	● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
			5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		● Problem solving – addition and subtraction (4)	4	Number – addition and subtraction	● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
	Unit 4, Measure – perimeter	● Kilometres	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute).
			5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
		● Perimeter of a rectangle (1)	3	Measurement	● Measure the perimeter of simple 2D shapes.
			4	Measurement	● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
		● Perimeter of a rectangle (2)	3	Measurement	● Measure the perimeter of simple 2D shapes.
			4	Measurement	● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
		● Perimeter of rectilinear shapes (1)	4	Measurement	● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
			5	Measurement	● Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
		● Perimeter of rectilinear shapes (2)	4	Measurement	● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
			5	Measurement	● Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
	Unit 5, Multiplication and division (1)	● Multiplying by multiples of 10 and 100	4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12. ● Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Dividing multiples of 10 and 100	4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12. ● Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.
		● Multiplying by 0 and 1	4	Number – multiplication and division	● 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.
		● Dividing by 1	4	Number – multiplication and division	● 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.
		● Multiplying and dividing by 6	3	Number – multiplication and division	● 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.
			4	Number – number and place value	● Count in multiples of 6, 7, 9, 25 and 1,000.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
		● 6 times-table	3	Number – multiplication and division	● 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.
			4	Number – number and place value	● Count in multiples of 6, 7, 9, 25 and 1,000.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
		● Multiplying and dividing by 9	3	Number – multiplication and division	● 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.
			4	Number – number and place value	● Count in multiples of 6, 7, 9, 25 and 1,000.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
		● 9 times-table	3	Number – multiplication and division	● Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ● Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.
			4	Number – number and place value	● Count in multiples of 6, 7, 9, 25 and 1,000.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
		● Multiplying and dividing by 7	3	Number – multiplication and division	● 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.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			3	Measurement	● Know the number of seconds in a minute and the number of days in each month, year and leap year.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
			4	Measurement	● Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
			5	Measurement	● Solve problems involving converting between units of time.
		● 7 times-table	3	Number – multiplication and division	● 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.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
		● 11 and 12 times-tables	3	Number – multiplication and division	● 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.
			4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
Textbook 4B	Unit 6, Multiplication and division (2)	● Problem solving – addition and multiplication	4	Number – multiplication and division	● Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			5	Number – multiplication and division	● Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
		● Problem solving – mixed problems	4	Number – multiplication and division	● Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
			5	Number – multiplication and division	● Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
		● Using written methods to multiply	4	Number – multiplication and division	● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
		● Multiplying a 2-digit number by a 1-digit number	4	Number – multiplication and division	● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
			5	Number – multiplication and division	● 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.
		● Multiplying a 3-digit number by a 1-digit number	4	Number – multiplication and division	● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
			5	Number – multiplication and division	● 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.
		● Problem solving – multiplication	4	Number – multiplication and division	● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			4	Number – multiplication and division	● Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
		● Multiplying more than two numbers (1)	4	Number – multiplication and division	● Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
		● Multiplying more than two numbers (2)	4	Number – multiplication and division	● Recognise and use factor pairs and commutativity in mental calculations.
			5	Number – multiplication and division	● Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
		● Problem solving – mixed correspondence problems	3	Number – multiplication and division	● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.
			4	Number – multiplication and division	● Recognise and use factor pairs and commutativity in mental calculations.
		● Dividing a 2-digit number by a 1-digit number (1)	4	Number – multiplication and division	● Recognise and use factor pairs and commutativity in mental calculations. ● Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Division with remainders	4	Number – multiplication and division	● 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. ● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
		● Dividing a 2-digit number by a 1-digit number (2)	4	Number – multiplication and division	● 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.
		● Dividing a 2-digit number by a 1-digit number (3)	4	Number – multiplication and division	● 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. ● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
		● Dividing a 3-digit number by a 1-digit number	4	Number – multiplication and division	● 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.
		● Problem solving – division	4	Number – multiplication and division	● Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
	Unit 7, Measure – area	● What is area?	4	Measurement	● Find the area of rectilinear shapes by counting squares.
		● Counting squares (1)	4	Measurement	● Find the area of rectilinear shapes by counting squares.
		● Counting squares (2)	4	Measurement	● Find the area of rectilinear shapes by counting squares.
		● Making shapes	4	Measurement	● Find the area of rectilinear shapes by counting squares.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Comparing area	4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
	Unit 8, Fractions (1)	● Tenths and hundredths (1)	3	Number – fractions	● Recognise and show, using diagrams, equivalent fractions with small denominators.
			4	Number – fractions (including decimals)	● Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
			5	Number – fractions (including decimals and percentages)	● Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
		● Tenths and hundredths (2)	3	Number – fractions	● 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. ● Recognise and show, using diagrams, equivalent fractions with small denominators.
			4	Number – fractions (including decimals)	● Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
			5	Number – fractions (including decimals and percentages)	● Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
		● Equivalent fractions (1)	4	Number – fractions (including decimals)	● Recognise and show, using diagrams, families of common equivalent fractions.
		● Equivalent fractions (2)	4	Number – fractions (including decimals)	● Recognise and show, using diagrams, families of common equivalent fractions.
		● Simplifying fractions	4	Number – fractions (including decimals)	● Recognise and show, using diagrams, families of common equivalent fractions.
			5	Number – fractions (including decimals and percentages)	● Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Fractions greater than 1 (1)	4	Number – fractions (including decimals)	● 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.
		● Fractions greater than 1 (2)	4	Number – fractions (including decimals)	● 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.
	Unit 9, Fractions (2)	● Adding fractions	4	Number – fractions (including decimals)	● 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. ● Add and subtract fractions with the same denominator.
			5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
		● Subtracting fractions (1)	4	Number – fractions (including decimals)	● 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. ● Add and subtract fractions with the same denominator.
			5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
		● Subtracting fractions (2)	4	Number – fractions (including decimals)	● 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. ● Add and subtract fractions with the same denominator.
			5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Problem solving – adding and subtracting fractions (1)	4	Number – fractions (including decimals)	● 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.
			5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
		● Problem solving – adding and subtracting fractions (2)	4	Number – fractions (including decimals)	● 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.
			5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
		● Calculating fractions of a quantity	4	Number – fractions (including decimals)	● 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.
		● Problem solving – fraction of a quantity (1)	4	Number – fractions (including decimals)	● 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.
		● Problem solving – fraction of a quantity (2)	4	Number – fractions (including decimals)	● 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.
	Unit 10, Decimals (1)	● Tenths (1)	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents of any number of tenths or hundredths.
		● Tenths (2)	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents of any number of tenths or hundredths.
		● Tenths (3)	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents of any number of tenths or hundredths. ● Solve simple measure and money problems involving fractions and decimals to two decimal places.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Dividing by 10 (1)	4	Number – fractions (including decimals)	● 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.
			5	Number – multiplication and division	● Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		● Dividing by 10 (2)	4	Number – fractions (including decimals)	● 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.
			5	Number – multiplication and division	● Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		● Hundredths (1)	4	Number – fractions (including decimals)	● Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ● Recognise and write decimal equivalents of any number of tenths or hundredths.
		● Hundredths (2)	4	Number – fractions (including decimals)	● Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ● Recognise and write decimal equivalents of any number of tenths or hundredths.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Hundredths (3)	4	Number – fractions (including decimals)	● Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ● 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.
		● Dividing by 100	4	Number – fractions (including decimals)	● 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.
			5	Number – multiplication and division	● Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		● Dividing by 10 and 100	4	Number – fractions (including decimals)	● 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.
			5	Number – multiplication and division	● Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
Textbook 4C	Unit 11, Decimals (2)	● Making a whole	4	Number – fractions (including decimals)	● Add and subtract fractions with the same denominator. ● Recognise and write decimal equivalents of any number of tenths or hundredths.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Writing decimals	4	Number – fractions (including decimals)	● 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.
		● Comparing decimals	4	Number – fractions (including decimals)	● Compare numbers with the same number of decimal places up to two decimal places.
			5	Number – fractions (including decimals and percentages)	● Read, write, order and compare numbers with up to three decimal places (two decimal places).
		● Ordering decimals	4	Number – fractions (including decimals)	● Compare numbers with the same number of decimal places up to two decimal places.
			5	Number – fractions (including decimals and percentages)	● Read, write, order and compare numbers with up to three decimal places (two decimal places).
		● Rounding decimals	4	Number – fractions (including decimals)	● Round decimals with one decimal place to the nearest whole number.
			5	Number – fractions (including decimals and percentages)	● Round decimals with two decimal places to the nearest whole number and to one decimal place (decimals with one decimal place).
		● Halves and quarters	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.
			5	Number – fractions (including decimals and percentages)	● Read and write decimal numbers as fractions (for example, $0{\cdot}71 = \frac{71}{100}$).
		● Problem solving – decimals	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
	Unit 12, Money	● Pounds and pence	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Pounds, tenths and hundredths	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
		● Ordering amounts of money	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
			5	Number – fractions (including decimals and percentages)	● Read, write, order and compare numbers with up to three decimal places (two decimal places).
		● Rounding money	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
		● Using rounding to estimate money	4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
		● Problem solving – pounds and pence	3	Measurement	● Add and subtract amounts of money to give change, using both £ and p in practical contexts.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
			5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places (two decimal places).

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Measurement	● Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
		● Problem solving – multiplication and division	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
			5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places (two decimal places).
			6	Measurement	● Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
		● Solving two-step problems	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
			5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places (two decimal places).
			6	Measurement	● Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
		● Problem solving – money	4	Number – fractions (including decimals)	● Solve simple measure and money problems involving fractions and decimals to two decimal places.

Power Maths Year 4			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			4	Measurement	● Estimate, compare and calculate different measures, including money in pounds and pence.
			5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places (two decimal places).
			6	Measurement	● Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
	Unit 13, Time	● Units of time (1)	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute).
		● Units of time (2)	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute).
		● Converting times (1)	3	Measurement	● Know the number of seconds in a minute and the number of days in each month, year and leap year.
			4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute). ● Read, write and convert time between analogue and digital 12- and 24-hour clocks.
		● Converting times (2)	3	Measurement	● Know the number of seconds in a minute and the number of days in each month, year and leap year.
			4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute). ● Read, write and convert time between analogue and digital 12- and 24-hour clocks.
		● Problem solving – units of time	3	Measurement	● Know the number of seconds in a minute and the number of days in each month, year and leap year.

Power Maths **Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute). ● Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
			5	Measurement	● Solve problems involving converting between units of time.
	Unit 14, Statistics	● Charts and tables (1)	3	Statistics	● Interpret and present data using bar charts, pictograms and tables.
			4	Statistics	● Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
			5	Statistics	● Complete, read and interpret information in tables, including timetables (tables).
		● Charts and tables (2)	3	Statistics	● Interpret and present data using bar charts, pictograms and tables. ● Solve one-step and two-step questions (for example, 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables.
			4	Statistics	● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
		● Line graphs (1)	4	Statistics	● Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
			5	Statistics	● Solve comparison, sum and difference problems using information presented in a line graph.
		● Line graphs (2)	4	Statistics	● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
			5	Statistics	● Solve comparison, sum and difference problems using information presented in a line graph.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Problem solving – graphs	3	Statistics	● Interpret and present data using bar charts, pictograms and tables. ● Solve one-step and two-step questions (for example, 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables.
			4	Statistics	● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
	Unit 15, Geometry – angles and 2D shapes	● Identifying angles	4	Geometry – properties of shapes	● Identify acute and obtuse angles and compare and order angles up to two right angles by size.
			5	Geometry – properties of shapes	● Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
		● Comparing and ordering angles	4	Geometry – properties of shapes	● Identify acute and obtuse angles and compare and order angles up to two right angles by size.
			5	Geometry – properties of shapes	● Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
		● Identifying regular and irregular shapes	4	Geometry – properties of shapes	● Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
			5	Geometry – properties of shapes	● Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
		● Classifying triangles	4	Geometry – properties of shapes	● Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
		● Classifying and comparing quadrilaterals	4	Geometry – properties of shapes	● Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
		● Deducing facts about shapes	4	Geometry – properties of shapes	● Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
		● Lines of symmetry inside a shape	4	Geometry – properties of shapes	● Identify lines of symmetry in 2D shapes presented in different orientations.

***Power Maths* Year 4**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Lines of symmetry outside a shape	4	Geometry – properties of shapes	● Identify lines of symmetry in 2D shapes presented in different orientations.
		● Completing a symmetric figure	4	Geometry – properties of shapes	● Complete a simple symmetric figure with respect to a specific line of symmetry.
		● Completing a symmetric shape	4	Geometry – properties of shapes	● Complete a simple symmetric figure with respect to a specific line of symmetry.
	Unit 16, Geometry – position and direction	● Describing position (1)	4	Geometry – position and direction	● Describe positions on a 2D grid as coordinates in the first quadrant.
		● Describing position (2)	4	Geometry – position and direction	● Describe positions on a 2D grid as coordinates in the first quadrant.
		● Drawing on a grid	4	Geometry – position and direction	● Plot specified points and draw sides to complete a given polygon.
		● Reasoning on a grid	4	Geometry – position and direction	● Describe positions on a 2D grid as coordinates in the first quadrant.
		● Moving on a grid	4	Geometry – position and direction	● Describe movements between positions as translations of a given unit to the left/right and up/down.
			5	Geometry – position and direction	● 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.
			6	Geometry – position and direction	● Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
		● Describing a movement on a grid	4	Geometry – position and direction	● Describe movements between positions as translations of a given unit to the left/right and up/down.
			5	Geometry – position and direction	● 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.
			6	Geometry – position and direction	● Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Year 5

Power Maths Year 5			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
Textbook 5A	Unit 1, Place value within 100,000	• Numbers to 10,000	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit (10,000). • Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (10,000).
		• Rounding to the nearest 10, 100 and 1,000	4	Number – number and place value	• Round any number to the nearest 10, 100 or 1,000.
			5	Number – number and place value	• Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 (10, 100 and 1,000).
			6	Number – number and place value	• Round any whole number to a required degree of accuracy.
		• 10,000s, 1,000s, 100s, 10s and 1s (1)	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (10,000).
		• 10,000s, 1,000s, 100s, 10s and 1s (2)	5	Number – number and place value	• Solve number problems and practical problems that involve all of the above.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (10,000).
		• The number line to 100,000	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit (100,000).
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (100,000).

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Comparing and ordering numbers to 100,000	4	Number – number and place value	• Order and compare numbers beyond 1,000.
			5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit (100,000).
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (100,000).
		• Rounding numbers within 100,000	4	Number – number and place value	• Round any number to the nearest 10, 100 or 1,000.
			5	Number – number and place value	• Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.
			6	Number – number and place value	• Round any whole number to a required degree of accuracy.
		• Roman numerals to 10,000	4	Number – number and place value	• 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. • Identify, represent and estimate numbers using different representations.
			5	Number – number and place value	Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.
	Unit 2, Place value within 1,000,000	• 100,000s, 10,000s, 1,000s, 100s, 10s and 1s (1)	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (1,000,000).
		• 100,000s, 10,000s, 1,000s, 100s, 10s and 1s (2)	5	Number – number and place value	• Solve number problems and practical problems that involve all of the above.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (1,000,000).
		• Number line to 1,000,000	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.

Power Maths Year 5			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – number and place value	● Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit (1,000,000).
		● Comparing and ordering numbers to 1,000,000	4	Number – number and place value	● Order and compare numbers beyond 1,000.
			5	Number – number and place value	● Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	● Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. (1,000,000)
		● Rounding numbers to a 1,000,000	4	Number – number and place value	● Round any number to the nearest 10, 100 or 1,000.
			5	Number – number and place value	● Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.
			6	Number – number and place value	● Round any whole number to a required degree of accuracy.
		● Negative numbers	4	Number – number and place value	● Count backwards through zero to include negative numbers.
			5	Number – number and place value	● Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
			6	Number – number and place value	● Use negative numbers in context, and calculate intervals across zero.
		● Counting in 10s, 100s, 1,000s, 10,000s	4	Number – number and place value	● Count in multiples of 6, 7, 9, 25 and 1,000 (1,000).
			5	Number – number and place value	● Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
		● Number sequences	5	Number – number and place value	● Solve number problems and practical problems that involve all of the above.
	Unit 3, Addition and subtraction	● Adding whole numbers with more than 4 digits (1)	5	Number – addition and subtraction	● Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Adding whole numbers with more than 4 digits (2)	5	Number – addition and subtraction	• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
		• Subtracting whole numbers with more than 4 digits (1)	5	Number – addition and subtraction	• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
		• Subtracting whole numbers with more than 4 digits (2)	5	Number – addition and subtraction	• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
		• Using rounding to estimate and check answers	5	Number – addition and subtraction	• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
		• Mental addition and subtraction (1)	5	Number – addition and subtraction	• Add and subtract numbers mentally with increasingly large numbers.
			6	Number – addition, subtraction, multiplication and division	• Perform mental calculations, including with mixed operations and large numbers.
		• Mental addition and subtraction (2)	5	Number – addition and subtraction	• Add and subtract numbers mentally with increasingly large numbers.
			5	Number – addition and subtraction	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
			6	Number – addition, subtraction, multiplication and division	• Perform mental calculations, including with mixed operations and large numbers.
		• Using inverse operations	4	Number – addition and subtraction	• Estimate and use inverse operations to check answers to a calculation.
		• Problem solving – addition and subtraction (1)	4	Number – addition and subtraction	• Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
			5	Number – addition and subtraction	• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – addition, subtraction, multiplication and division	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		● Problem solving – addition and subtraction (2)	4	Number – addition and subtraction	● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
			5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
			6	Number – addition, subtraction, multiplication and division	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
	Unit 4, Graphs and tables	● Interpreting tables	4	Statistics	● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
			5	Statistics	● Complete, read and interpret information in tables, including timetables.
		● Two-way tables	4	Statistics	● Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
			5	Statistics	● Complete, read and interpret information in tables, including timetables.
		● Interpreting line graphs (1)	4	Statistics	● Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ● Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
			5	Statistics	● Solve comparison, sum and difference problems using information presented in a line graph.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems (line graphs).
		• Interpreting line graphs (2)	4	Statistics	• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
			5	Statistics	• Solve comparison, sum and difference problems using information presented in a line graph.
			6	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems (line graphs).
		• Drawing line graphs	4	Statistics	• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
			5	Statistics	• Solve comparison, sum and difference problems using information presented in a line graph.
			6	Statistics	• Interpret and construct pie charts and line graphs and use these to solve problems (line graphs).
	Unit 5, Multiplication and division (1)	• Multiples	4	Number – multiplication and division	• Recall multiplication and division facts for multiplication tables up to 12 × 12.
			5	Number – multiplication and division	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
			6	Number – addition, subtraction, multiplication and division	• Identify common factors, common multiples and prime numbers.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Factors	4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12. ● Recognise and use factor pairs and commutativity in mental calculations.
			5	Number – multiplication and division	● Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. ● Establish whether a number up to 100 is prime and recall prime numbers up to 19.
			6	Number – addition, subtraction, multiplication and division	● Identify common factors, common multiples and prime numbers.
		● Prime numbers	4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
			5	Number – multiplication and division	● Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
			6	Number – addition, subtraction, multiplication and division	● Identify common factors, common multiples and prime numbers.
		● Using factors	4	Number – multiplication and division	● Recall multiplication and division facts for multiplication tables up to 12 × 12.
			5	Number – multiplication and division	● Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
			6	Number – addition, subtraction, multiplication and division	● Identify common factors, common multiples and prime numbers.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Squares	4	Number – multiplication and division	• Recall multiplication and division facts for multiplication tables up to 12 × 12.
			5	Number – multiplication and division	• Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}). • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
		• Cubes	4	Number – multiplication and division	• Recall multiplication and division facts for multiplication tables up to 12 × 12.
			5	Number – multiplication and division	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. • Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}). • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
		• Inverse operations	5	Number – multiplication and division	• Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
		• Multiplying whole numbers by 10, 100 and 1,000	5	Number – multiplication and division	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
		• Dividing whole numbers by 10, 100 and 1,000	5	Number – multiplication and division	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. • Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
		• Multiplying and dividing by multiples of 10, 100 and 1,000	5	Number – multiplication and division	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
	Unit 6, Measure – area and perimeter	● Measuring perimeter	4	Measurement	● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
			5	Measurement	● Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
		● Calculating perimeter (1)	4	Measurement	● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
			5	Measurement	● Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
		● Calculating perimeter (2)	4	Measurement	● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
			5	Measurement	● Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
		● Calculating area (1)	4	Measurement	● Find the area of rectilinear shapes by counting squares.
			5	Measurement	● Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes.
		● Calculating area (2)	5	Measurement	● Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes.
			6	Algebra	● Use simple formulae.
			6	Measurement	● Recognise when it is possible to use formulae for area and volume of shapes.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Comparing area	5	Measurement	• Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes.
			6	Algebra	• Use simple formulae.
			6	Measurement	• Recognise when it is possible to use formulae for area and volume of shapes.
		• Estimating area	5	Measurement	• Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes.
Textbook 5B	Unit 7, Multiplication and division (2)	• Multiplying numbers up to 4 digits by a 1-digit number	4	Number – multiplication and division	• Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
			5	Number – multiplication and division	• 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.
		• Multiplying 2-digit numbers (1)	5	Number – multiplication and division	• Multiply and divide numbers mentally drawing upon known facts.
		• Multiplying 2-digit numbers (2)	5	Number – multiplication and division	• Multiply and divide numbers mentally drawing upon known facts.
		• Multiplying 2-digit numbers (3)	5	Number – multiplication and division	• 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.
		• Multiplying a 3-digit number by a 2-digit number	5	Number – multiplication and division	• 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.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Multiplying a 4-digit number by a 2-digit number	5	Number – multiplication and division	● 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.
			6	Number – addition, subtraction, multiplication and division	● Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
		● Dividing up to a 4-digit number by a 1-digit number (1)	5	Number – 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.
		● Dividing up to a 4-digit number by a 1-digit number (2)	5	Number – 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.
		● Division with remainders (1)	5	Number – 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.
		● Division with remainders (2)	5	Number – 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.
		● Problem solving – division with remainders	5	Number – 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.
	Unit 8, Fractions (1)	● Equivalent fractions	4	Number – fractions (including decimals)	● Recognise and show, using diagrams, families of common equivalent fractions.
			5	Number – fractions (including decimals and percentages)	● Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Converting improper fractions to mixed numbers	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$).
		• Converting mixed numbers to improper fractions	5	Number – fractions (including decimals and percentages)	• 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 sequences	5	Number – fractions (including decimals and percentages)	• Compare and order fractions whose denominators are all multiples of the same number.
		• Comparing and ordering fractions (1)	5	Number – fractions (including decimals and percentages)	• Compare and order fractions whose denominators are all multiples of the same number.
		• Comparing and ordering fractions (2)	5	Number – fractions (including decimals and percentages)	• Compare and order fractions whose denominators are all 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$).
			6	Number – fractions (including decimals and percentages)	• Compare and order fractions, including fractions > 1.
		• Fractions as division (1)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$).
		• Fractions as division (2)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$).

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – fractions (including decimals and percentages)	● Associate a fraction with division and calculate decimal fraction equivalents (for example, 0·375) for a simple fraction (for example, $\frac{3}{8}$).
	Unit 9, Fractions (2)	● Adding and subtracting fractions with the same denominator	4	Number – fractions (including decimals)	● Add and subtract fractions with the same denominator.
			5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
		● Adding and subtracting fractions (1)	5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
		● Adding and subtracting fractions (2)	5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
		● Adding fractions (1)	5	Number – fractions (including decimals and percentages)	● 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). ● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Adding fractions (2)	5	Number – fractions (including decimals and percentages)	● 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). ● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		● Adding fractions (3)	5	Number – fractions (including decimals and percentages)	● 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). ● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		● Subtracting fractions (1)	5	Number – fractions (including decimals and percentages)	● 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). ● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

Power Maths Year 5			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – fractions (including decimals and percentages)	• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		• Subtracting fractions (2)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). • Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		• Subtracting fractions (3)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). • Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	• Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Subtracting fractions (4)	5	Number – fractions (including decimals and percentages)	● 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). ● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		● Problem solving – mixed word problems (1)	5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		● Problem solving – mixed word problems (2)	5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
	Unit 10, Fractions (3)	• Multiplying fractions (1)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
		• Multiplying fractions (2)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
		• Multiplying fractions (3)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
		• Multiplying fractions (4)	5	Number – fractions (including decimals and percentages)	• 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
		• Calculating fractions of amounts	5	Number – fractions (including decimals and percentages)	• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Using fractions as operators	5	Number – fractions (including decimals and percentages)	● 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, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$). ● Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
		● Problem solving – mixed word problems	5	Number – fractions (including decimals and percentages)	● Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
	Unit 11, Decimals and percentages	● Writing decimals (1)	5	Number – fractions (including decimals and percentages)	● Read, write, order and compare numbers with up to three decimal places.
		● Writing decimals (2)	5	Number – fractions (including decimals and percentages)	● Read, write, order and compare numbers with up to three decimal places.
		● Decimals as fractions (1)	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.
			5	Number – fractions (including decimals and percentages)	● Read and write decimal numbers as fractions (for example, 0·71 = $\frac{71}{100}$).
		● Decimals as fractions (2)	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.
			5	Number – fractions (including decimals and percentages)	● Read and write decimal numbers as fractions (for example, 0·71 = $\frac{71}{100}$).
		● Understanding thousandths	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.
			5	Number – fractions (including decimals and percentages)	● Read and write decimal numbers as fractions (for example, 0·71 = $\frac{71}{100}$).

Power Maths Year 5			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		● Writing thousandths as decimals	4	Number – fractions (including decimals)	● Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.
			5	Number – fractions (including decimals and percentages)	● Read and write decimal numbers as fractions (for example, 0·71 = $\frac{71}{100}$).
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		● Ordering and comparing decimals (1)	4	Number – fractions (including decimals)	● Compare numbers with the same number of decimal places up to two decimal places
			5	Number – fractions (including decimals and percentages)	● Read, write, order and compare numbers with up to three decimal places.
		● Ordering and comparing decimals (2)	5	Number – fractions (including decimals and percentages)	● Read, write, order and compare numbers with up to three decimal places.
		● Rounding decimals	4	Number – fractions (including decimals)	● Round decimals with one decimal place to the nearest whole number.
			5	Number – fractions (including decimals and percentages)	● Round decimals with two decimal places to the nearest whole number and to one decimal place.
		● Understanding percentages	5	Number – fractions (including 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.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Percentages as fractions and decimals	5	Number – fractions (including 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.
			6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
		● Equivalent fractions, decimals and percentages	5	Number – fractions (including 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.
			6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
Textbook 5C	Unit 12, Decimals	● Adding and subtracting decimals (1)	5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places.
		● Adding and subtracting decimals (2)	5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places.
		● Adding and subtracting decimals (3)	5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places.
		● Adding and subtracting decimals (4)	5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places.

Power Maths Year 5			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Adding and subtracting decimals (5)	5	Number – fractions (including decimals and percentages)	• Solve problems involving number up to three decimal places.
		• Adding and subtracting decimals (6)	5	Number – fractions (including decimals and percentages)	• Solve problems involving number up to three decimal places.
		• Adding and subtracting decimals (7)	5	Number – fractions (including decimals and percentages)	• Solve problems involving number up to three decimal places.
		• Adding and subtracting decimals (8)	5	Number – fractions (including decimals and percentages)	• Solve problems involving number up to three decimal places.
		• Decimal sequences	5	Number – fractions (including decimals and percentages)	• Read, write, order and compare numbers with up to three decimal places.
		• Problem solving – decimals (1)	5	Number – fractions (including decimals and percentages)	• Solve problems involving number up to three decimal places.
		• Problem solving – decimals (2)	5	Number – fractions (including decimals and percentages)	• Solve problems involving number up to three decimal places.
		• Multiplying decimals by 10	5	Number – fractions (including decimals and percentages)	• Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • Solve problems involving number up to three decimal places.
			5	Number – multiplication and division	• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
			6	Number – fractions (including decimals and percentages)	• Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Multiplying decimals by 10, 100 and 1,000	5	Number – fractions (including decimals and percentages)	● Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. ● Solve problems involving number up to three decimal places.
			5	Number – multiplication and division	● Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		● Dividing decimals by 10	5	Number – fractions (including decimals and percentages)	● Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. ● Solve problems involving number up to three decimal places.
			5	Number – multiplication and division	● Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		● Dividing decimals by 10, 100 and 1,000	5	Number – fractions (including decimals and percentages)	● Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. ● Solve problems involving number up to three decimal places.
			5	Number – multiplication and division	● Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – fractions (including decimals and percentages)	● Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
	Unit 13, Geometry – properties of shapes (1)	● Measuring angles in degrees	5	Geometry – properties of shapes	● 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°.
		● Measuring with a protractor (1)	4	Geometry – properties of shapes	● Identify acute and obtuse angles and compare and order angles up to two right angles by size.
			5	Geometry – properties of shapes	● Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. ● Draw given angles, and measure them in degrees (°).
		● Measuring with a protractor (2)	4	Geometry – properties of shapes	● Identify acute and obtuse angles and compare and order angles up to two right angles by size.
			5	Geometry – properties of shapes	● Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. ● Draw given angles, and measure them in degrees (°). ● 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°.
		● Drawing lines and angles accurately	5	Geometry – properties of shapes	● Draw given angles, and measure them in degrees (°).

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Calculating angles on a straight line	5	Geometry – properties of shapes	● 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°.
			6	Geometry – properties of shapes	● Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
		● Calculating angles around a point	5	Geometry – properties of shapes	● 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°.
			6	Geometry – properties of shapes	● Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
		● Calculating lengths and angles in shapes	5	Geometry – properties of shapes	● Use the properties of rectangles to deduce related facts and find missing lengths and angles.
			6	Geometry – properties of shapes	● Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
	Unit 14, Geometry – properties of shapes (2)	● Recognising and drawing parallel lines	5	Geometry – properties of shapes	● 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°. ● Use the properties of rectangles to deduce related facts and find missing lengths and angles.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Recognising and drawing perpendicular lines	5	Geometry – properties of shapes	● 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°. ● Use the properties of rectangles to deduce related facts and find missing lengths and angles.
			6	Geometry – properties of shapes	● Draw 2D shapes using given dimensions and angles.
		● Reasoning about parallel and perpendicular lines	5	Geometry – properties of shapes	● Draw given angles, and measure them in degrees (°). ● 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°. ● Use the properties of rectangles to deduce related facts and find missing lengths and angles.
		● Regular and irregular polygons	5	Geometry – properties of shapes	● Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
			6	Geometry – properties of shapes	● Draw 2D shapes using given dimensions and angles. ● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		● Reasoning about 3D shapes	5	Geometry – properties of shapes	● Identify 3D shapes, including cubes and other cuboids, from 2D representations.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
	Unit 15, Geometry – position and direction	● Reflection	4	Geometry – properties of shapes	● Complete a simple symmetric figure with respect to a specific line of symmetry.
			5	Geometry – position and direction	● 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.
		● Reflection with coordinates	4	Geometry – position and direction	● Describe positions on a 2D grid as coordinates in the first quadrant.
			5	Geometry – position and direction	● 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.
			6	Geometry – position and direction	● Describe positions on the full coordinate grid (all four quadrants) (first quadrant). ● Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
		● Translation	4	Geometry – position and direction	● Describe movements between positions as translations of a given unit to the left/right and up/down.
			5	Geometry – position and direction	● 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.
			6	Geometry – position and direction	● Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
		● Translation with coordinates	4	Geometry – position and direction	● Describe positions on a 2D grid as coordinates in the first quadrant. ● Describe movements between positions as translations of a given unit to the left/right and up/down.
			5	Geometry – position and direction	● 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.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Geometry – position and direction	● Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
	Unit 16, Measure – converting units	● Metric units (1)	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute).
			5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
			6	Measurement	● 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.
		● Metric units (2)	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute).
			5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
			6	Measurement	● 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.
		● Metric units (3)	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute).
			5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). ● Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.

Power Maths Year 5			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Measurement	● 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.
		● Metric units (4)	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute).
			5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). ● Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.
			6	Measurement	● 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.
		● Imperial units of length	5	Measurement	● Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
		● Imperial units of mass	5	Measurement	● Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
		● Imperial units of capacity	5	Measurement	● Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
		● Converting units of time	4	Measurement	● Convert between different units of measure (for example, kilometre to metre; hour to minute). ● Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

***Power Maths* Year 5**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			5	Measurement	● Solve problems involving converting between units of time.
		● Timetables	4	Measurement	● Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
			5	Measurement	● Solve problems involving converting between units of time.
			5	Statistics	● Complete, read and interpret information in tables, including timetables.
		● Problem solving – measure	5	Measurement	● Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.
			6	Measurement	● Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
	Unit 17, Measure – volume and capacity	● What is volume?	5	Measurement	● Estimate volume (for example, using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (for example, using water).
		● Comparing volumes	5	Measurement	● Estimate volume (for example, using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (for example, using water).
		● Estimating volume	5	Measurement	● Estimate volume (for example, using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (for example, using water).
		● Estimating capacity	5	Measurement	● Estimate volume (for example, using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (for example, using water).

Year 6

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
Textbook 6A	Unit 1, Place value to 10,000,000	• Numbers to 1,000,000	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. • Solve number and practical problems that involve all of the above.
		• Numbers to 10,000,000 (1)	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit • Solve number and practical problems that involve all of the above.
		• Numbers to 10,000,000 (2)	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. • Solve number and practical problems that involve all of the above.
		• Number line to 10,000,000	5	Number – number and place value	• Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. • Solve number and practical problems that involve all of the above.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Comparing and ordering numbers to 10,000,000	5	Number – number and place value	● Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
			6	Number – number and place value	● Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. ● Solve number and practical problems that involve all of the above.
		● Rounding numbers	5	Number – number and place value	● Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.
			6	Number – number and place value	● Round any whole number to a required degree of accuracy.
		● Negative numbers	5	Number – number and place value	● Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
			6	Number – number and place value	● Use negative numbers in context, and calculate intervals across zero.
	Unit 2, Four operations (1)	● Problem solving – using written methods of addition and subtraction (1)	5	Number – addition and subtraction	● Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). ● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		● Problem solving – using written methods of addition and subtraction (2)	5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
		● Multiplying numbers up to 4 digits by a 1-digit number	5	Number – multiplication and division	● 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.
			6	Number – addition, subtraction, multiplication and division	● Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Multiplying numbers up to 4 digits by a 2-digit number	5	Number – multiplication and division	● 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.
			6	Number – addition, subtraction, multiplication and division	● Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
		● Dividing numbers up to 4 digits by a 2-digit number (1)	6	Number – addition, subtraction, multiplication and 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.
		● Dividing numbers up to 4 digits by a 2-digit number (2)	6	Number – addition, subtraction, multiplication and 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.
		● Dividing numbers up to 4 digits by a 2-digit number (3)	6	Number – addition, subtraction, multiplication and division	● 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.
		● Dividing numbers up to 4 digits by a 2-digit number (4)	6	Number – addition, subtraction, multiplication and division	● 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.
		● Dividing numbers up to 4 digits by a 2-digit number (5)	6	Number – addition, subtraction, multiplication and division	● 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.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Dividing numbers up to 4 digits by a 2-digit number (6)	6	Number – addition, subtraction, multiplication and division	• 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.
	Unit 3, Four operations (2)	• Common factors	5	Number – multiplication and division	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
			6	Number – addition, subtraction, multiplication and division	• Identify common factors, common multiples and prime numbers.
		• Common multiples	5	Number – multiplication and division	• Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
			6	Number – addition, subtraction, multiplication and division	• Identify common factors, common multiples and prime numbers.
		• Recognising prime numbers up to 100	5	Number – multiplication and division	• Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. • Establish whether a number up to 100 is prime and recall prime numbers up to 19.
			6	Number – addition, subtraction, multiplication and division	• Identify common factors, common multiples and prime numbers.
		• Squares and cubes	5	Number – multiplication and division	• Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}).
		• Order of operations	6	Number – addition, subtraction, multiplication and division	• Use their knowledge of the order of operations to carry out calculations involving the four operations.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Brackets	6	Number – addition, subtraction, multiplication and division	● Use their knowledge of the order of operations to carry out calculations involving the four operations.
		● Mental calculations (1)	5	Number – addition and subtraction	● Add and subtract numbers mentally with increasingly large numbers.
			5	Number – multiplication and division	● Multiply and divide numbers mentally drawing upon known facts.
			6	Number – addition, subtraction, multiplication and division	● Perform mental calculations, including with mixed operations and large numbers.
		● Mental calculations (2)	5	Number – addition and subtraction	● Add and subtract numbers mentally with increasingly large numbers.
			6	Number – addition, subtraction, multiplication and division	● Perform mental calculations, including with mixed operations and large numbers.
		● Reasoning from known facts	5	Number – addition and subtraction	● Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
			6	Number – addition, subtraction, multiplication and division	● Use their knowledge of the order of operations to carry out calculations involving the four operations. ● Solve problems involving addition, subtraction, multiplication and division.
	Unit 4, Fractions (1)	● Simplifying fractions (1)	6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
		● Simplifying fractions (2)	5	Number – fractions (including decimals and percentages)	● Compare and order fractions whose denominators are all multiples of the same number.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Compare and order fractions, including fractions > 1.
		● Fractions on a number line	5	Number – fractions (including decimals and percentages)	● Compare and order fractions whose denominators are all multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Compare and order fractions, including fractions > 1.
		● Comparing and ordering fractions (1)	5	Number – fractions (including decimals and percentages)	● Compare and order fractions whose denominators are all multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Compare and order fractions, including fractions > 1.
		● Comparing and ordering fractions (2)	6	Number – fractions (including decimals and percentages)	● Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. ● Compare and order fractions, including fractions > 1.
		● Adding and subtracting fractions (1)	5	Number – fractions (including decimals and percentages)	● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
			6	Number – fractions (including decimals and percentages)	● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		● Adding and subtracting fractions (2)	6	Number – fractions (including decimals and percentages)	● Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

Power Maths **Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		• Adding fractions	6	Number – fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		• Subtracting fractions	6	Number – fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		• Problem solving – adding and subtracting fractions (1)	6	Number – fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
		• Problem solving – adding and subtracting fractions (2)	6	Number – fractions (including decimals and percentages)	• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
	Unit 5, Fractions (2)	• Multiplying a fraction by a whole number	5	Number – fractions (including decimals and percentages)	• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
		• Multiplying a fraction by a fraction (1)	6	Number – fractions (including decimals and percentages)	• Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$).
		• Multiplying a fraction by a fraction (2)	6	Number – fractions (including decimals and percentages)	• Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$).
		• Dividing a fraction by a whole number (1)	6	Number – fractions (including decimals and percentages)	• Divide proper fractions by whole numbers (for example, $\frac{1}{3} \div 2 = \frac{1}{6}$).
		• Dividing a fraction by a whole number (2)	6	Number – fractions (including decimals and percentages)	• Divide proper fractions by whole numbers (for example, $\frac{1}{3} \div 2 = \frac{1}{6}$).
		• Dividing a fraction by a whole number (3)	6	Number – fractions (including decimals and percentages)	• Divide proper fractions by whole numbers (for example, $\frac{1}{3} \div 2 = \frac{1}{6}$).

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Four rules with fractions	6	Number – addition, subtraction, multiplication and division	● Use their knowledge of the order of operations to carry out calculations involving the four operations.
			6	Number – fractions (including decimals and percentages)	● 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, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$).
		● Calculating fractions of amounts	6	Number – fractions (including decimals and percentages)	● Use written division methods in cases where the answer has up to two decimal places.
		● Problem solving – fractions of amounts	6	Number – fractions (including decimals and percentages)	● Use written division methods in cases where the answer has up to two decimal places.
	Unit 6, Geometry – position and direction	● Plotting coordinates in the first quadrant	5	Geometry – position and direction	● 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.
			6	Geometry – position and direction	● Describe positions on the full coordinate grid (all four quadrants).
		● Plotting coordinates	6	Geometry – position and direction	● Describe positions on the full coordinate grid (all four quadrants).
		● Plotting translations and reflections	6	Geometry – position and direction	● Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
		● Reasoning about shapes with coordinates	5	Geometry – position and direction	● 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.
			6	Geometry – position and direction	● Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
Textbook 6B	Unit 7, Decimals	• Multiplying by 10, 100 and 1,000	6	Number – fractions (including decimals and percentages)	• Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		• Dividing by multiples of 10, 100 and 1,000	6	Number – fractions (including decimals and percentages)	• Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
		• Decimals as fractions	5	Number – fractions (including decimals and percentages)	• Read and write decimal numbers as fractions (for example, 0·71 = $\frac{71}{100}$).
			6	Number – fractions (including decimals and percentages)	• 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 1,000 giving answers up to three decimal places.
		• Fractions as decimals (1)	5	Number – fractions (including decimals and percentages)	• Read and write decimal numbers as fractions (for example, 0·71 = $\frac{71}{100}$).
			6	Number – fractions (including decimals and percentages)	• Associate a fraction with division and calculate decimal fraction equivalents (for example, 0·375) for a simple fraction (for example, $\frac{3}{8}$).
		• Fractions as decimals (2)	6	Number – fractions (including decimals and percentages)	• Associate a fraction with division and calculate decimal fraction equivalents (for example, 0·375) for a simple fraction (for example, $\frac{3}{8}$). • Use written division methods in cases where the answer has up to two decimal places.
		• Multiplying decimals (1)	6	Number – fractions (including decimals and percentages)	• Multiply one-digit numbers with up to two decimal places by whole numbers.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Multiplying decimals (2)	6	Number – fractions (including decimals and percentages)	● Multiply one-digit numbers with up to two decimal places by whole numbers.
		● Dividing decimals (1)	6	Number – fractions (including decimals and percentages)	● Associate a fraction with division and calculate decimal fraction equivalents (for example, 0·375) for a simple fraction (for example, $\frac{3}{8}$). ● Solve problems which require answers to be rounded to specified degrees of accuracy.
		● Dividing decimals (2)	6	Number – fractions (including decimals and percentages)	● 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.
	Unit 8, Percentages	● Percentage of (1)	5	Number – fractions (including 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.
			6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
			6	Ratio and proportion	● Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
		● Percentage of (2)	6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
			6	Ratio and proportion	● Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Percentage of (3)	6	Number – fractions (including decimals and percentages)	● Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$). ● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
			6	Ratio and proportion	● Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
		● Percentage of (4)	6	Number – fractions (including decimals and percentages)	● Multiply one-digit numbers with up to two decimal places by whole numbers. ● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
			6	Ratio and proportion	● Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
		● Finding missing values	6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
			6	Ratio and proportion	● Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
		● Converting fractions to percentages	6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
		● Equivalent fractions, decimals and percentages (1)	6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Equivalent fractions, decimals and percentages (2)	6	Number – fractions (including decimals and percentages)	● Compare and order fractions, including fractions > 1. ● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
		● Mixed problem solving	6	Number – fractions (including decimals and percentages)	● Solve problems which require answers to be rounded to specified degrees of accuracy. ● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
	Unit 9, Algebra	● Finding a rule (1)	6	Algebra	● Use simple formulae. ● Generate and describe linear number sequences.
		● Finding a rule (2)	6	Algebra	● Use simple formulae. ● Generate and describe linear number sequences.
		● Using a rule (1)	6	Algebra	● Generate and describe linear number sequences. ● Express missing number problems algebraically.
		● Using a rule (2)	6	Algebra	● Generate and describe linear number sequences. ● Express missing number problems algebraically.
		● Using a rule (3)	6	Algebra	● Generate and describe linear number sequences.
		● Formulae	6	Algebra	● Use simple formulae. ● Enumerate possibilities of combinations of two variables.
		● Solving equations (1)	6	Algebra	● Express missing number problems algebraically.
		● Solving equations (2)	6	Algebra	● Express missing number problems algebraically.
		● Solving equations (3)	6	Algebra	● Express missing number problems algebraically.
		● Solving equations (4)	6	Algebra	● Find pairs of numbers that satisfy an equation with two unknowns. ● Enumerate possibilities of combinations of two variables.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Solving equations (5)	6	Algebra	● Find pairs of numbers that satisfy an equation with two unknowns. ● Enumerate possibilities of combinations of two variables.
	Unit 10, Measure – imperial and metric measures	● Metric measures	5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
			6	Measurement	● 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.
		● Converting metric measures	5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
			6	Measurement	● 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.
		● Problem solving – metric measures	5	Measurement	● Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
			6	Measurement	● Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
		● Miles and km	5	Measurement	● Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
			6	Measurement	● Convert between miles and kilometres.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Imperial measures	5	Measurement	● Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
			6	Measurement	● 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.
	Unit 11 – Measure perimeter, area and volume	● Shapes with the same area	6	Measurement	● Recognise that shapes with the same areas can have different perimeters and vice versa.
		● Area and perimeter (1)	6	Measurement	● Recognise that shapes with the same areas can have different perimeters and vice versa.
		● Area and perimeter (2)	6	Measurement	● Recognise that shapes with the same areas can have different perimeters and vice versa.
		● Area of a parallelogram	6	Measurement	● Recognise when it is possible to use formulae for area and volume of shapes. ● Calculate the area of parallelograms and triangles
		● Area of a triangle (1)	6	Measurement	● Calculate the area of parallelograms and triangles.
		● Area of a triangle (2)	6	Measurement	● Calculate the area of parallelograms and triangles.
		● Area of a triangle (3)	6	Measurement	● Calculate the area of parallelograms and triangles.
		● Problem solving – area	6	Measurement	● Calculate the area of parallelograms and triangles.
		● Problem solving – perimeter	6	Measurement	● Recognise that shapes with the same areas can have different perimeters and vice versa.
		● Volume of a cuboid (1)	5	Measurement	● Estimate volume (for example, using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (for example, using water).

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Measurement	● Recognise when it is possible to use formulae for area and volume of shapes. ● Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units (for example, mm^3 and km^3).
		● Volume of a cuboid (2)	5	Measurement	● Estimate volume (for example, using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (for example, using water).
			6	Measurement	● Recognise when it is possible to use formulae for area and volume of shapes. ● Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units (for example, mm^3 and km^3).
	Unit 12, Ratio and proportions	● Ratio (1)	6	Ratio and proportion	● Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ● Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		● Ratio (2)	6	Ratio and proportion	● Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ● Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Ratio (3)	6	Ratio and proportion	● Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ● Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		● Ratio (4)	6	Ratio and proportion	● Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ● Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		● Scale drawings	6	Ratio and proportion	● Solve problems involving similar shapes where the scale factor is known or can be found.
		● Scale factors	6	Ratio and proportion	● Solve problems involving similar shapes where the scale factor is known or can be found.
		● Similar shapes	6	Ratio and proportion	● Solve problems involving similar shapes where the scale factor is known or can be found.
		● Problem solving – ratio and proportion (1)	5	Number – multiplication and division	● Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.
			6	Ratio and proportion	● Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ● Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		● Problem solving – ratio and proportion (2)	5	Number – multiplication and division	● Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Ratio and proportion	● Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ● Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Textbook 6C	Unit 13, Geometry – properties of shapes	● Measuring with a protractor	5	Geometry – properties of shapes	● Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. ● Draw given angles, and measure them in degrees (°).
			6	Geometry – properties of shapes	● Draw 2D shapes using given dimensions and angles.
		● Drawing shapes accurately	5	Geometry – properties of shapes	● Draw given angles, and measure them in degrees (°).
			6	Geometry – properties of shapes	● Draw 2D shapes using given dimensions and angles.
		● Angles in triangles (1)	6	Geometry – properties of shapes	● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		● Angles in triangles (2)	6	Geometry – properties of shapes	● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		● Angles in triangles (3)	6	Geometry – properties of shapes	● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		● Angles in polygons (1)	5	Geometry – properties of shapes	● Use the properties of rectangles to deduce related facts and find missing lengths and angles.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Geometry – properties of shapes	● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		● Angles in polygons (2)	5	Geometry – properties of shapes	● Use the properties of rectangles to deduce related facts and find missing lengths and angles.
			6	Geometry – properties of shapes	● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons.
		● Vertically opposite angles	5	Geometry – properties of shapes	● 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°.
			6	Geometry – properties of shapes	● Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
		● Equal distance	6	Geometry – properties of shapes	● Illustrate and name parts of circles, including radius, diameter and circumference, and know that the diameter is twice the radius.
		● Parts of a circle	6	Geometry – properties of shapes	● Illustrate and name parts of circles, including radius, diameter and circumference, and know that the diameter is twice the radius.
		● Nets (1)	5	Geometry – properties of shapes	● Identify 3D shapes, including cubes and other cuboids, from 2D representations.
			6	Geometry – properties of shapes	● Recognise, describe and build simple 3D shapes, including making nets.
		● Nets (2)	5	Geometry – properties of shapes	● Identify 3D shapes, including cubes and other cuboids, from 2D representations.
			6	Geometry – properties of shapes	● Recognise, describe and build simple 3D shapes, including making nets.

***Power Maths* Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
	Unit 14, Problem solving	● Problem solving – place value	5	Number – number and place value	● Solve number problems and practical problems that involve all of the above.
			6	Number – number and place value	● Solve number and practical problems that involve all of the above.
		● Problem solving – negative numbers	5	Number – number and place value	● Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
			6	Number – number and place value	● Solve number and practical problems that involve all of the above.
		● Problem solving – addition and subtraction	5	Number – addition and subtraction	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
			6	Number – addition, subtraction, multiplication and division	● Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. ● Solve problems involving addition, subtraction, multiplication and division. ● Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
		● Problem solving – four operations (1)	5	Number – multiplication and division	● Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
			5	Measurement	● Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.

Power Maths **Year 6**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Number – addition, subtraction, multiplication and division	● Use their knowledge of the order of operations to carry out calculations involving the four operations. ● Solve problems involving addition, subtraction, multiplication and division. ● Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
		● Problem solving – four operations (2)	5	Number – multiplication and division	● Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
			5	Measurement	● Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.
			6	Number – addition, subtraction, multiplication and division	● Solve problems involving addition, subtraction, multiplication and division.
		● Problem solving – fractions	6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
		● Problem solving – decimals	5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places. ● 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.
			6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● Problem solving – percentages	5	Number – fractions (including decimals and percentages)	● Solve problems involving number up to three decimal places. ● 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.
			6	Number – fractions (including decimals and percentages)	● Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
			6	Ratio and proportion	● Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
		● Problem solving – ratio and proportion	6	Ratio and proportion	● Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ● Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
		● Problem solving – time (1)	5	Measurement	● Solve problems involving converting between units of time.
			6	Measurement	● 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.
		● Problem solving – time (2)	5	Measurement	● Solve problems involving converting between units of time.
			6	Measurement	● 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**			**National curriculum programmes of study**		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
			6	Measurement	● Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
		● Problem solving – position and direction	6	Geometry – position and direction	● Describe positions on the full coordinate grid (all four quadrants).
		● Problem solving – properties of shapes (1)	5	Geometry – properties of shapes	● 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°.
			6	Geometry – properties of shapes	● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons. ● Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
		● Problem solving – properties of shapes (2)	5	Geometry – properties of shapes	● 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°.
			6	Geometry – properties of shapes	● Compare and classify geometric shapes based on their properties and sizes, and find unknown angles in any triangles, quadrilaterals and regular polygons. ● Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
	Unit 15, Statistics	● The mean (1)	6	Statistics	● Calculate and interpret the mean as an average.
		● The mean (2)	6	Statistics	● Calculate and interpret the mean as an average.

Power Maths Year 6			National curriculum programmes of study		
Term	**Unit**	**Lesson titles**	**Year**	**Domain**	**Pupils should be taught to:**
		● The mean (3)	6	Statistics	● Calculate and interpret the mean as an average.
		● Introducing pie charts	6	Statistics	● Interpret and construct pie charts and line graphs and use these to solve problems.
		● Reading and interpreting pie charts	6	Statistics	● Interpret and construct pie charts and line graphs and use these to solve problems.
		● Fractions and pie charts (1)	6	Statistics	● Interpret and construct pie charts and line graphs and use these to solve problems.
		● Fractions and pie charts (2)	6	Statistics	● Interpret and construct pie charts and line graphs and use these to solve problems.
		● Percentages and pie charts	6	Number – addition, subtraction, multiplication and division	● Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
			6	Ratio and proportion	● Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison.
			6	Statistics	● Interpret and construct pie charts and line graphs and use these to solve problems.
		● Interpreting line graphs	5	Statistics	● Solve comparison, sum and difference problems using information presented in a line graph.
			6	Number – addition, subtraction, multiplication and division	● Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
			6	Statistics	● Interpret and construct pie charts and line graphs and use these to solve problems.
		● Constructing line graphs	5	Statistics	● Solve comparison, sum and difference problems using information presented in a line graph.
			6	Statistics	● Interpret and construct pie charts and line graphs and use these to solve problems.