

Power Maths WRM Edition Year 4 Power Up progression

Textbook 4A

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	1	Represent and partition numbers to 1,000	Count in multiples of 6, 7, 9, 25 and 1,000.	Children count in 50s on a number line to find the missing numbers.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	2	Number line to 1,000	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children revise place value in 3-digit numbers by working out the hidden numbers behind splats on place value equipment.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	3	Multiples of 1,000	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children revisit place value in 3-digit numbers, and make 3-digit numbers using different place value equipment.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	4	4-digit numbers	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children match 3-digit numbers written out in words to representations in place value equipment.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	5	Partition 4-digit numbers	Count in multiples of 6, 7, 9, 25 and 1,000.	Children count forwards and backwards in multiples of 1,000.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	6	Partition 4-digit numbers flexibly	Round any number to the nearest 10, 100 or 1,000.	Children use digit cards to create a 3-digit number, then use a number line to support rounding each one to the nearest 10 and nearest 100.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	7	1, 10, 100, 1,000 more or less	Round any number to the nearest 10, 100 or 1,000.	Children use digit cards to create a 4-digit number, then use a number line to support rounding each one to the nearest 10 and nearest 100.

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Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	8	1,000s, 100s, 10s and 1s	Round any number to the nearest 10, 100 or 1,000.	Children recap rounding rules, then round 3-digit numbers up and down to the nearest 10 and 100.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	1	Number line to 10,000	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children match 4-digit numbers written out in words to representations in place value equipment.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	2	Between two multiples	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children use the digits 7, 2, 5 and 8 to make numbers for certain criteria.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	3	Estimate on a number line to 10,000	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children identify missing digits in 4-digit numbers using written clues, working with multiples, rounding and prime numbers.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	4	Compare and order numbers to 10,000	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children create a 4-digit number from 0–9 digit cards to meet given criteria, such as closest to 2,000.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	5	Round to the nearest 1,000	Find 1,000 more or less than a given number.	Children count forwards and backwards in 1,000s to find missing numbers.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	6	Round to the nearest 100	Order and compare numbers beyond 1,000.	Children compare pairs of 4-digit numbers using $<$, $>$ and $=$, using a variety of pictorial representations and place value cards, within same 1,000 and different 1,000s.

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Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	7	Round to the nearest 10	Order and compare numbers beyond 1,000.	Children are given a number and a sign, then select a number from a pool to complete the equality or inequality.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	8	Round to the nearest 1,000, 100 or 10	Round any number to the nearest 10, 100 or 1,000.	Children generate a 4-digit number, then round to nearest 10, 100 and 1,000.
Number – addition and subtraction	Unit 3	Addition and subtraction	1	Add and subtract 1s, 10s, 100s, 1,000s	Round any number to the nearest 10, 100 or 1,000	Children generate a 4-digit number, then round to nearest 10, 100 and 1,000.
Number – addition and subtraction	Unit 3	Addition and subtraction	2	Add two 4-digit numbers	Solve number and practical problems that involve addition and subtraction and with increasingly large positive numbers.	Children complete a crossword with 4-digit number clues involving rounding and place value.
Number – addition and subtraction	Unit 3	Addition and subtraction	3	Add two 4-digit numbers – one exchange	Count in multiples of 6, 7, 9, 25 and 1,000.	Children count in multiples of 25 on a number line.
Number – addition and subtraction	Unit 3	Addition and subtraction	4	Add with more than one exchange	Order and compare numbers beyond 1,000.	Children create six 4-digit numbers from 4, 6, 5 and 9 then place in ascending order.
Number – addition and subtraction	Unit 3	Addition and subtraction	5	Subtract two 4-digit numbers	Order and compare numbers beyond 1,000.	Children use two sets of 0–9 digit cards to create 4-digit numbers to be placed in a 4×4 grid. They identify all 4-digit numbers across rows, columns and diagonals.

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Number – addition and subtraction	Unit 3	Addition and subtraction	6	Subtract two 4-digit numbers – one exchange	Order and compare numbers beyond 1,000.	Children use two sets of 0–9 digit cards to create 4-digit numbers to be placed in a 4×4 grid. They identify all 4-digit numbers across rows, columns and diagonals then answer questions based on these numbers.
Number – addition and subtraction	Unit 3	Addition and subtraction	7	Subtract two 4-digit numbers – more than one exchange	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children sort addition calculations into sorting circles to show which ones they would do mentally, and which ones to use the column method for.
Number – addition and subtraction	Unit 3	Addition and subtraction	8	Exchange across two columns	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children identify patterns in addition and subtraction calculations (4 digits and 2 digits) to help solve the number sentences.
Number – addition and subtraction	Unit 3	Addition and subtraction	9	Efficient methods	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children find patterns in addition and subtraction calculations with a focus on adding and subtracting multiples of 100 mentally.
Number – addition and subtraction	Unit 3	Addition and subtraction	10	Equivalent difference	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children sort subtraction calculations into sorting circles to show which ones they would do mentally, and which ones they would use the column method for.
Number – addition and subtraction	Unit 3	Addition and subtraction	11	Estimate answers	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children complete a crossword with clues involving the addition and subtraction of 4-digit numbers.

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Number – addition and subtraction	Unit 3	Addition and subtraction	12	Check strategies	Estimate and use inverse operations to check answers to a calculation.	Children estimate answer to additions and subtractions involving 4-digit numbers then complete number sentences with $<$, $>$ and $=$.
Number – addition and subtraction	Unit 3	Addition and subtraction	13	Problem solving – one step	Estimate and use inverse operations to check answers to a calculation.	Children complete a table to show inverse calculations for checking additions and subtractions with 4-digit numbers.
Number – addition and subtraction	Unit 3	Addition and subtraction	14	Problem solving – comparison	Estimate and use inverse operations to check answers to a calculation.	Children identify the fact families for part-whole models, partitioning 4-digit numbers into other 4-digit numbers.
Number – addition and subtraction	Unit 3	Addition and subtraction	15	Problem solving – two steps	Find 1,000 more or less than a given number.	Children count backwards in 1,000s to complete number lines.
Number – addition and subtraction	Unit 3	Addition and subtraction	16	Problem solving – multi-step problems	Find 1,000 more or less than a given number.	Children work out the input to a function machine with two functions.
Measurement	Unit 4	Measure – area	1	What is area?	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children identify the two steps of functions in a function machine, using 4-digit numbers, and are encouraged to check using the inverse.
Measurement	Unit 4	Measure – area	2	Measure area using squares	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children complete two-step problems to create balanced calculations with both addition and subtraction.

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Measurement	Unit 4	Measure – area	3	Count squares	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children complete a multiplication grid to focus on instant recall of multiplication facts ($\times 2$, $\times 3$, $\times 4$, $\times 5$, $\times 8$ and $\times 10$).
Measurement	Unit 4	Measure – area	4	Make shapes	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children complete a multiplication grid with some products supplied but not all the numbers which are being multiplied, so children use recall of multiplication facts and division.
Measurement	Unit 4	Measure – area	5	Compare area	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children use multiplications up to the 12 times-table to balance calculations.
Number – multiplication and division	Unit 5	Multiplication and division (1)	1	Multiples of 3	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children complete a multiplication grid to make $\times 10$, $\times 100$ and $\times 1,000$ tables.
Number – multiplication and division	Unit 5	Multiplication and division (1)	2	Multiply and divide by 6	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children complete a multiplication grid to make $\times 5$, $\times 50$ and $\times 500$ tables.
Number – multiplication and division	Unit 5	Multiplication and division (1)	3	6 times-table and division facts	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children balance scales linking multiplication facts, identifying the missing numbers.
Number – multiplication and division	Unit 5	Multiplication and division (1)	4	Multiply and divide by 9	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children use $<$, $>$ or $=$ to complete number sentences linking multiplication facts.

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Number – multiplication and division	Unit 5	Multiplication and division (1)	5	9 times-table and division facts	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children use $<$, $>$ or $=$ to complete number sentences linking multiplication and division facts.
Number – multiplication and division	Unit 5	Multiplication and division (1)	6	The 3, 6 and 9 times-tables	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children multiply given numbers by 8 then use sorting circles to show which calculations have a remainder.
Number – multiplication and division	Unit 5	Multiplication and division (1)	7	Multiply and divide by 7	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children use sorting circles to show which numbers are divisible by 5 and 6 (no remainders).
Number – multiplication and division	Unit 5	Multiplication and division (1)	8	7 times-table and division facts	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children complete a section of 12×12 multiplication grid, with products supplied but not multipliers, in order to work out what numbers different shapes represent.
Number – multiplication and division	Unit 5	Multiplication and division (1)	9	11 and 12 times-tables and division facts	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children choose a number between 1 and 9. This is the remainder. They write a division statement to give this remainder.
Number – multiplication and division	Unit 5	Multiplication and division (1)	10	Multiply by 1 and 0	Count in multiples of 6, 7, 9, 25 and 1,000.	Children count in multiples of 3, 6 and 9, comparing patterns, using one to support the other.

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Number – multiplication and division	Unit 5	Multiplication and division (1)	11	Divide by 1 and itself	Count in multiples of 6, 7, 9, 25 and 1,000.	Children count up in 7s to find missing numbers on number tracks.
Number – multiplication and division	Unit 5	Multiplication and division (1)	12	Multiply three numbers	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children throw darts to choose a number and then an operation: divide by 1, multiply by 1, divide by itself.

Textbook 4B

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Number – multiplication and division	Unit 6	Multiplication and division (2)	1	Factor pairs	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children complete a crossword for multiplication facts focusing on 6, 7, 9, 25 and 1,000 times-tables.
Number – multiplication and division	Unit 6	Multiplication and division (2)	2	Multiply and divide by 10	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children use digit cards to find solutions to: $[?] \times [?] + [?] = 50$.
Number – multiplication and division	Unit 6	Multiplication and division (2)	3	Multiply and divide by 100	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children use digit cards to find solutions to: $[?] \times [?] + [?] = 100$.
Number – multiplication and division	Unit 6	Multiplication and division (2)	4	Related facts – multiplication	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children build numbers from a range of 1s, 10s, 100s and 1,000s to make the largest and smallest possible numbers.
Number – multiplication and division	Unit 6	Multiplication and division (2)	5	Related facts – division	Round any number to the nearest 10, 100 or 1,000.	Children sort 3-digit numbers into a table to show which round down to the nearest 100 and which round up.

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Number – multiplication and division	Unit 6	Multiplication and division (2)	6	Multiply and add	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.	Children use function machines to multiply by 10 or 100, and observe how the numbers change once they have been through the machine.
Number – multiplication and division	Unit 6	Multiplication and division (2)	7	Informal written methods	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.	Children use function machines to divide by 10 or 100, and observe how the numbers change once they have been through the machine.
Number – multiplication and division	Unit 6	Multiplication and division (2)	8	Multiply 2 digits by 1 digit	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.	Children use digit cards to find what is the smallest, largest and closest number to 7,000 they can make using the number sentence $[?] \times [?] \times [?] = [?]$.
Number – multiplication and division	Unit 6	Multiplication and division (2)	9	Multiply 3 digits by 1 digit	Recognise and use factor pairs and commutativity in mental calculations.	Children find all the factor pairs for 64.
Number – multiplication and division	Unit 6	Multiplication and division (2)	10	Solve multiplication problems	Recognise and use factor pairs and commutativity in mental calculations.	Children play bingo with factors to numbers between 1 and 15.
Number – multiplication and division	Unit 6	Multiplication and division (2)	11	Basic division	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children solve a word problem concerning integer scaling.

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Number – multiplication and division	Unit 6	Multiplication and division (2)	12	Division and remainders	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children use dice to randomly choose numbers to first multiply and then add in an attempt to make a total of 24.
Number – multiplication and division	Unit 6	Multiplication and division (2)	13	Divide 2-digit numbers	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children roll four dice and have a target of getting 50 by carrying out two multiplications and an addition.
Number – multiplication and division	Unit 6	Multiplication and division (2)	14	Divide 3-digit numbers	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children choose 1-digit numbers and one of the four operations to make a total of 72.
Number – multiplication and division	Unit 6	Multiplication and division (2)	15	Correspondence problems	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	Children use digit cards to create 2- or 3-digit by 1-digit number column multiplications.
Number – multiplication and division	Unit 6	Multiplication and division (2)	16	Efficient multiplication	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	Children find the missing digit or digits in 2- or 3-digit by 1-digit number column multiplications.

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Measurement	Unit 7	Length and perimeter	1	Measure in km and m	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children use clues of 4-digit numbers written out in words to complete a grid.
Measurement	Unit 7	Length and perimeter	2	Perimeter on a grid	Round any number to the nearest 10, 100 or 1,000.	Children explore a range of numbers which can be rounded to 3,000 and look at rounding to nearest 10, 100 and 1,000.
Measurement	Unit 7	Length and perimeter	3	Perimeter of a rectangle	Round any number to the nearest 10, 100 or 1,000.	Children identify a number or range given rounding clues.
Measurement	Unit 7	Length and perimeter	4	Perimeter of rectilinear shapes	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Children partition 4-digit numbers in both part-whole models and number sentences.
Measurement	Unit 7	Length and perimeter	5	Find missing lengths in rectilinear shapes	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children find the missing digits in 2-digit and 3-digit number column additions.
Measurement	Unit 7	Length and perimeter	6	Perimeter of polygons	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children find the missing digits in 2-digit and 3-digit number column additions.
Number – fractions	Unit 8	Fractions (1)	1	Count beyond 1	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children find the missing digit in a 3-digit number minus a 2- or 3-digit number column subtraction.

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Number – fractions	Unit 8	Fractions (1)	2	Partition a mixed number	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children find the missing digits in a 3-digit number minus 2- or 3-digit number column subtractions with exchanges.
Number – fractions	Unit 8	Fractions (1)	3	Number lines with mixed numbers	Estimate and use inverse operations to check answers to a calculation.	Children are given subtractions to check if they are correct and are encouraged to use the inverse.
Number – fractions	Unit 8	Fractions (1)	4	Compare and order mixed numbers	Estimate and use inverse operations to check answers to a calculation.	Children are given addition calculations and use the inverse to check they are correct.
Number – fractions	Unit 8	Fractions (1)	5	Convert mixed numbers to improper fractions	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children explore the relationship between the 3, 6, 9 and 12 times-tables.
Number – fractions	Unit 8	Fractions (1)	6	Convert improper fractions to mixed numbers	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children explore the relationship between the 2, 4, 8 and 12 times-tables.
Number – fractions	Unit 8	Fractions (1)	7	Equivalent fractions	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.	Children multiply three numbers together by finding the product of one multiplication first, then completing the calculation.
Number – fractions	Unit 8	Fractions (1)	8	Equivalent fraction families	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.	Children are given 144 and 360 as totals and work out which three numbers they would multiply to make that product.

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Number – fractions	Unit 8	Fractions (1)	9	Simplify fractions	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.	Children re-write 2-digit number multiplied by 1-digit number calculations to solve using place value and also using the distributive law.
Number – fractions	Unit 9	Fractions (2)	1	Add and subtract two or more fractions	Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.	Children partition multiplications to make them more efficient to solve.
Number – fractions	Unit 9	Fractions (2)	2	Add fractions and mixed numbers	Recognise and show, using diagrams, families of common equivalent fractions.	Children show equivalent improper fractions for $3\frac{2}{6}$.
Number – fractions	Unit 9	Fractions (2)	3	Subtract from mixed numbers	Recognise and show, using diagrams, families of common equivalent fractions.	Children complete fraction additions within 1.
Number – fractions	Unit 9	Fractions (2)	4	Subtract from whole amounts	Add and subtract fractions with the same denominator.	Children complete fraction additions, including improper fractions and mixed numbers.
Number – fractions	Unit 9	Fractions (2)	5	Problem solving – add and subtract fractions (1)	Add and subtract fractions with the same denominator.	Children complete fraction subtractions, including a word problem.
Number – fractions	Unit 9	Fractions (2)	6	Problem solving – add and subtract fractions (2)	Add and subtract fractions with the same denominator.	Children complete fraction subtractions, including improper fractions and mixed numbers.
Number – fractions	Unit 9	Fractions (2)	7	Fraction of an amount	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	Children spot and correct mistakes in formal 4-digit number addition and subtraction calculations.

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Number – fractions	Unit 9	Fractions (2)	8	Problem solving – fraction of an amount	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	Children spot and correct mistakes in formal 3-digit number by 1- or 2-digit number multiplications.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	1	Tenths as fractions	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children choose four digit cards and arrange them from largest to smallest to make a 4-digit number, and from smallest to largest to make another 4-digit number. They subtract the smaller number from the larger, with a target of reaching the answer of 6,174.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	2	Tenths as decimals	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children use bar model format to find the missing number in the bars and check their answer using the inverse operation. Children work with numbers up to 4 digits.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	3	Tenths on a place value grid	Compare numbers with the same number of decimal places up to 2 decimal places.	Children use four digit cards to form numbers with 2 decimal places, then order these from smallest to largest.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	4	Tenths on a number line (1)	Add and subtract fractions with the same denominator.	Children solve fraction word problems.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	5	Tenths on a number line (2)	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children use subtraction to find the missing numbers in bar models.

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Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	6	Divide 1 digit by 10	Estimate and use inverse operations to check answers to a calculation.	Children estimate answer to additions and subtractions involving 4-digit numbers.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	7	Divide 2 digits by 10	Recognise and write decimal equivalents of any number of tenths or hundredths.	Children use place value equipment to represent decimal numbers with 2 decimal places.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	8	Hundredths as fractions	Recognise and write decimal equivalents of any number of tenths or hundredths.	Children count in tenths to complete number lines.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	9	Hundredths as decimals	Recognise and write decimal equivalents of any number of tenths or hundredths.	Children represent decimal numbers using place value equipment.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	10	Hundredths on a place value grid	Solve simple measure and money problems involving fractions and decimals to two decimal places.	Children work out fractions of amounts involving money and length.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	11	Divide 1 or 2 digits by 100	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.	Children use dividing by 10 or 100 to convert millimetres to centimetres and centimetres to metres. They identify result as centimetres, tenths of a centimetre, 100ths of a centimetre, etc.
Number – fractions (including decimals and percentages)	Unit 10	Decimals (1)	12	Divide by 10 and 100	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.	Children convert pence to pounds by dividing by 100, and look for patterns.

Textbook 4C

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – fractions (including decimals and percentages)	Unit 11	Decimals (2)	1	Make a whole	Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10.	Children revise tenths, counting up and down a fraction number line to find the missing numbers.
Number – fractions (including decimals and percentages)	Unit 11	Decimals (2)	2	Partition decimals	Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10.	Children identify how many hundredths different shapes represent by using a 100 square.
Number – fractions (including decimals and percentages)	Unit 11	Decimals (2)	3	Flexibly partition decimals	Recognise and show, using diagrams, families of common equivalent fractions.	Children focus on equivalence between tenths and hundredths.
Number – fractions (including decimals and percentages)	Unit 11	Decimals (2)	4	Compare decimals	Recognise and show, using diagrams, families of common equivalent fractions.	Children find equivalent fractions using a fraction wall.
Number – fractions (including decimals and percentages)	Unit 11	Decimals (2)	5	Order decimals	Recognise and show, using diagrams, families of common equivalent fractions.	Children find the odd one out with equivalent fractions.
Number – fractions (including decimals and percentages)	Unit 11	Decimals (2)	6	Round to the nearest whole	Recognise and show, using diagrams, families of common equivalent fractions.	Children identify which image does not show $\frac{3}{5}$ and explain their reasoning.
Number – fractions (including decimals and percentages)	Unit 11	Decimals (2)	7	Halves and quarters as decimals	Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.	Children convert decimals (with 1 decimal place) to fractions and fractions to decimals then order from smallest to largest.
Measurement	Unit 12	Money	1	Write money using decimals	Round any number to the nearest 10, 100 or 1,000; round decimals with one decimal place to the nearest whole number.	Children spot and correct mistakes in rounding up to 4-digit numbers to 10, 100 and 1,000. Numbers include litres and kilograms.

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Measurement	Unit 12	Money	2	Convert between pounds and pence	Compare numbers with the same number of decimal places up to 2 decimal places.	Children represent numbers with 2 decimal places using base 10 equipment.
Measurement	Unit 12	Money	3	Compare amounts of money	Compare numbers with the same number of decimal places up to 2 decimal places.	Children represent prices with 2 decimal places using base 10 equipment, then place in ascending order.
Measurement	Unit 12	Money	4	Estimate with money	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children work out total bills for café orders using multiplication and addition with decimal numbers.
Measurement	Unit 12	Money	5	Calculate with money	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children are given different lengths and find the total length using multiplication and division with decimal and whole numbers.
Measurement	Unit 12	Money	6	Solve problems with money	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children find total masses using multiplication and addition with decimal and whole numbers.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 13	Time	1	Years, months, weeks and days	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children solve word problems to work out total volumes using multiplication and addition with decimal and whole numbers.
Measurement	Unit 13	Time	2	Hours, minutes and seconds	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children find fractions of money in pounds and pence.
Measurement	Unit 13	Time	3	Convert between analogue and digital times	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children find fractions of lengths in centimetres, metres and kilometres, with whole numbers and to 1 decimal place.
Measurement	Unit 13	Time	4	Convert to the 24 hour clock	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children find fractions of masses in grams and kilograms, with whole numbers or to 1 decimal place.
Measurement	Unit 13	Time	5	Problem solving – convert units of time	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children find fractions of capacities in millilitres and litres, with whole numbers and to 1 decimal place.
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	1	Identify angles	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children use four digit cards to make an amount in millilitres, then rearrange the cards to make a second amount to add to the first amount. They convert the total into litres and millilitres.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	2	Compare and order angles	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children use four digit cards to make an amount in grams, then rearrange the cards to make a second amount to add to the first amount. They convert the total into kilograms and grams.
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	3	Triangles	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Children use four digit cards to make an amount in pence, then rearrange the cards to make a second amount to add to the first amount. They convert the total into pounds and pence.
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	4	Quadrilaterals	Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Children find total number of minutes for a journey given in hours and minutes
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	5	Polygons	Recall multiplication and division facts for multiplication tables up to 12×12 .	Children complete a puzzle with 2-digit and 3-digit numbers found by solving clues such as the 8th multiple of 5, the 9th multiple of 4, etc.
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	6	Reason about polygons	Order and compare numbers beyond 1,000.	Children use digit cards to make some inequality statements using 4-digit numbers.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	7	Lines of symmetry	Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.	Children convert decimals (with 2 decimal places) to fractions and fractions to decimals then order from smallest to largest.
Geometry – properties of shapes	Unit 14	Geometry – angles and 2D shapes	8	Complete a symmetric figure	Recognise and show, using diagrams, families of common equivalent fractions.	Children find the odd one out in sets of decimals and fractions of equivalent value.
Statistics	Unit 15	Statistics	1	Interpret charts	Recognise and show, using diagrams, families of common equivalent fractions.	Children sort fractions into groups of equivalent fractions.
Statistics	Unit 15	Statistics	2	Solve problems with charts (1)	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.	Children adapt a recipe for 6 people to make enough for 2 people using division.
Statistics	Unit 15	Statistics	3	Solve problems with charts (2)	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.	Children adapt a recipe for 8 people to make enough for 6 people using division and multiplication.
Statistics	Unit 15	Statistics	4	Interpret line graphs (1)	Round decimals with one decimal place to the nearest whole number.	Children use their understanding about rounding decimals to work out which number does not round to 35.
Statistics	Unit 15	Statistics	5	Interpret line graphs (2)	Compare numbers with the same number of decimal places up to two decimal places.	Children complete a list of decimals with 2 decimal places to make ascending and descending lists.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Statistics	Unit 15	Statistics	6	Draw line graphs	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.	Children use dominoes as fractions, with the smaller number as the numerator and the larger number as the denominator, and then sort the fractions into groups with same denominator. Children add the largest and smallest fractions in each group and look for patterns in the totals.
Geometry – position and direction	Unit 16	Geometry – position and direction	1	Describe position	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.	Children use dominoes as fractions and sort them into sets of equivalent fractions, then order the rest from smallest to greatest fraction.
Geometry – position and direction	Unit 16	Geometry – position and direction	2	Describe position using coordinates	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children estimate answers to addition and subtraction calculations with money to 2 decimal places. Children convert the amounts into pence then use the column method to calculate the total before converting back.
Geometry – position and direction	Unit 16	Geometry – position and direction	3	Plot coordinates	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children check whether addition and subtraction calculations using pounds and pence are correct by converting amount into pence then using the column method.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Geometry – position and direction	Unit 16	Geometry – position and direction	4	Draw 2D shapes on a grid	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children solve word problems concerning money including decimals and fractions.
Geometry – position and direction	Unit 16	Geometry – position and direction	5	Translate on a grid	Solve simple measure and money problems involving fractions and decimals to 2 decimal places.	Children solve money puzzles by using 12 coins to create the smallest and largest amounts of money.
Geometry – position and direction	Unit 16	Geometry – position and direction	6	Describe translation on a grid	Round any number to the nearest 10, 100 or 1,000; round decimals with one decimal place to the nearest whole number.	Children have three digit cards and a decimal point to make some numbers with 1 or 2 decimal places. They then round to nearest whole number.