

# Power Maths Year 4

## Power Up progression



### Textbook 4A (Term 1) overview

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	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	Rounding to the nearest 10	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	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	Rounding to the nearest 100	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	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	Counting in 1,000s	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	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	Representing 4-digit numbers	Count in multiples of 6, 7, 9, 25 and 1,000 Find 1,000 more or less than a given number	Children count forwards and backwards in multiples of 1,000.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	6	1,000s, 100s, 10s and 1s	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	The number line to 10,000 (1)	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.
Number – number and place value	Unit 1	Place value – 4-digit numbers (1)	8	The number line to 10,000 (2)	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 1	Place value – 4-digit numbers (1)	9	Roman numerals to 100	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	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)	1	Finding 1,000 more or less	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	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)	2	Comparing 4-digit numbers (1)	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	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)	3	Comparing 4-digit numbers (2)	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	Children choose a challenge to create a 4-digit number from 0–9 digit cards to meet criteria, such as closest to 2,000.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	4	Ordering numbers to 10,000	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)	5	Rounding to the nearest 1,000	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.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	6	Solving problems using rounding	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. Could have more than one possible solution.
Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	7	Counting in 25s	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.

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Number – number and place value	Unit 2	Place value – 4-digit numbers (2)	8	Negative numbers (1)	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 – number and place value	Unit 2	Place value – 4-digit numbers (2)	9	Negative numbers (2)	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	1	Adding and subtracting 1s, 10s, 100s, 1,000s	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	2	Adding two 4-digit numbers (1)	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	3	Adding two 4-digit numbers (2)	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.
Number – addition and subtraction	Unit 3	Addition and subtraction	4	Adding two 4-digit numbers (3)	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. Children 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	5	Subtracting two 4-digit numbers (1)	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	6	Subtracting two 4-digit numbers (2)	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	7	Subtracting two 4-digit numbers (3)	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	8	Subtracting two 4-digit numbers (4)	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 to use the column method for.
Number – addition and subtraction	Unit 3	Addition and subtraction	9	Equivalent difference	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.
Number – addition and subtraction	Unit 3	Addition and subtraction	10	Estimating answers to additions and subtractions	Count backwards through 0 to include negative numbers	Children complete number tracks to count backwards through 0 into negative numbers. Also count backwards in 2s.
Number – addition and subtraction	Unit 3	Addition and subtraction	11	Checking strategies	Count backwards through 0 to include negative numbers	Children use the thermometer as a number line to complete addition and subtraction calculations given as word problems. Involves counting back through 0 to negative numbers.
Number – addition and subtraction	Unit 3	Addition and subtraction	12	Problem solving – addition and subtraction (1)	Count backwards through 0 to include negative numbers	Children answer word problems for counting backwards and forwards through 0.
Number – addition and subtraction	Unit 3	Addition and subtraction	13	Problem solving – addition and subtraction (2)	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	14	Problem solving – addition and subtraction (3)	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	15	Problem solving – addition and subtraction (4)	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.

Strand	Unit	Lesson number	Lesson title	National curriculum objective	Power Up specifics	
Measurement	Unit 4	Measure – perimeter	1	Kilometres	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 – perimeter	2	Perimeter of a rectangle (1)	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Children complete 2-step problems to create balanced calculations with both addition and subtraction.
Measurement	Unit 4	Measure – perimeter	3	Perimeter of a rectangle (2)	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children complete a multiplication grid to focus on instant recall of Year 2/Year 3 multiplication facts (2, 3, 4, 5, 8 and 10).
Measurement	Unit 4	Measure – perimeter	4	Perimeter of rectilinear shapes (1)	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children complete a multiplication grid with some products supplied but not all the numbers which are being multiplied, so children use recall of facts and division.
Measurement	Unit 4	Measure - perimeter	5	Perimeter of rectilinear shapes (2)	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children use multiplications up to the 12 times-table to balance calculations.
Number – multiplication and division	Unit 5	Multiplication and division (1)	1	Multiplying by multiples of 10 and 100	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	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	Dividing multiples of 10 and 100	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	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	Multiplying by 0 and 1	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children balance scales linking multiplication facts to identify missing numbers.
Number – multiplication and division	Unit 5	Multiplication and division (1)	4	Dividing by 1	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children balance scales linking multiplication facts, using $<$ , $>$ and $=$ to identify missing numbers.
Number – multiplication and division	Unit 5	Multiplication and division (1)	5	Multiplying and dividing by 6	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children balance scales linking times-table and division facts, using $<$ , $>$ and $=$ to identify missing numbers.
Number – multiplication and division	Unit 5	Multiplication and division (1)	6	6 times-table	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	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	Multiplying and dividing by 9	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	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	9 times-table	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children throw darts to be given a number and then an operation: divide by 1, multiply by 1, divide by itself.
Number – multiplication and division	Unit 5	Multiplication and division (1)	9	Multiplying and dividing by 7	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	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	7 times-table	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.
Number – multiplication and division	Unit 5	Multiplication and division (1)	11	11 and 12 times-tables	Count in multiples of 6, 7, 9, 25 and 1,000	Children count up in 7s to find missing numbers on number tracks.

## Textbook 4B (Term 2) overview

Strand	Unit	Lesson number	Lesson title	National curriculum objective	Power Up specifics	
Number – multiplication and division	Unit 6	Multiplication and division (2)	1	Problem solving – addition and multiplication	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children are given a section of $12 \times 12$ multiplication grid to complete, with products supplied but not multipliers, in order to work out what numbers different shapes represent.
Number – multiplication and division	Unit 6	Multiplication and division (2)	2	Problem solving – mixed problems	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children complete crossword for multiplication facts focusing on 6, 7, 9, 25 and 1,000 times-tables

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – multiplication and division	Unit 6	Multiplication and division (2)	3	Using written methods to multiply	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 $\square \times \square + \square = 50$ .
Number – multiplication and division	Unit 6	Multiplication and division (2)	4	Multiplying a 2-digit number by a 1-digit number	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 $\square \square \times \square + \square = 100$ .
Number – multiplication and division	Unit 6	Multiplication and division (2)	5	Multiplying a 3-digit number by a 1-digit number	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout	Children use digit cards to create 2-digit or 3-digit by 1-digit column multiplications.
Number – multiplication and division	Unit 6	Multiplication and division (2)	6	Problem solving – multiplication	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout	Children find missing digit or digits in 2- or 3-digit by 1-digit column multiplications.
Number – multiplication and division	Unit 6	Multiplication and division (2)	7	Multiplying more than two numbers (1)	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've been through the machine.
Number – multiplication and division	Unit 6	Multiplication and division (2)	8	Multiplying more than two numbers (2)	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've been through the machine.
Number – multiplication and division	Unit 6	Multiplication and division (2)	9	Problem solving – mixed correspondence problem	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 largest/smallest/closest to 500 they can make using format $\square \square \times \square \times \square =$ .
Number – multiplication and division	Unit 6	Multiplication and division (2)	10	Dividing a 2-digit number by a 1-digit number (1)	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)	11	Division with remainders	Recognise and use factor pairs and commutativity in mental calculations	Children sort numbers into a two-way table to show which are even, odd, a square number and not a square number.
Number – multiplication and division	Unit 6	Multiplication and division (2)	12	Dividing a 2-digit number by a 1-digit number (2)	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)	13	Dividing a 2-digit number by a 1-digit number (3)	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.
Number – multiplication and division	Unit 6	Multiplication and division (2)	14	Dividing a 3-digit number by a 1-digit number	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)	15	Problem solving – 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 roll four dice and have a target of getting 50 by carrying out two multiplications and an addition.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 7	Measure – area	1	What is area?	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.
Measurement	Unit 7	Measure – area	2	Counting squares (1)	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	Children build numbers from a range of ones, tens, hundreds and thousands to make the largest and smallest possible numbers.
Measurement	Unit 7	Measure – area	3	Counting squares (2)	Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	Children use clues of 4-digit numbers written out in words to complete a grid.
Measurement	Unit 7	Measure – area	4	Making shapes	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	Measure – area	5	Comparing area	Round any number to the nearest 10, 100 or 1,000	Children identify a number or range given rounding clues.
Number – fractions	Unit 8	Fractions (1)	1	Tenths and hundredths	Count backwards through 0 to include negative numbers	Children identify missing numbers on a number line when 0 is marked in the middle of the line.
Number – fractions	Unit 8	Fractions (1)	2	Hundredths	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	Unit 8	Fractions (1)	3	Equivalent fractions (1)	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	Unit 8	Fractions (1)	4	Equivalent fractions (2)	Recognise and show, using diagrams, families of common equivalent fractions	Children focus on equivalence between tenths and hundredths.
Number – fractions	Unit 8	Fractions (1)	5	Simplifying fractions	Recognise and show, using diagrams, families of common equivalent fractions	Children find equivalent fractions using a fraction wall.
Number – fractions	Unit 8	Fractions (1)	6	Fractions greater than 1 (1)	Recognise and show, using diagrams, families of common equivalent fractions	Children find the odd one out with equivalent fractions.
Number – fractions	Unit 8	Fractions (1)	7	Fractions greater than 1 (2)	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	Unit 9	Fractions (2)	1	Adding fractions	Recognise and show, using diagrams, families of common equivalent fractions	Children show equivalent improper fractions for $3\frac{2}{5}$ .
Number – fractions	Unit 9	Fractions (2)	2	Subtracting fractions (1)	Add and subtract fractions with the same denominator	Children complete fraction additions with a variety of fractions but all within 1.
Number – fractions	Unit 9	Fractions (2)	3	Subtracting fractions (2)	Add and subtract fractions with the same denominator	Children complete fraction additions, including improper fractions and mixed numbers.
Number – fractions	Unit 9	Fractions (2)	4	Problem solving – adding and subtracting fractions (1)	Add and subtract fractions with the same denominator	Children complete fraction subtractions, including a word problem.
Number – fractions	Unit 9	Fractions (2)	5	Problem solving – adding and subtracting	Add and subtract fractions with the same denominator	Children complete fraction subtractions, including improper fractions and mixed numbers.
Number – fractions	Unit 9	Fractions (2)	6	Calculating fractions of a quantity	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- and 3-digit number column additions.
Number – fractions	Unit 9	Fractions (2)	7	Problem solving – fraction of a quantity (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 digits in 2- and 3-digit number column additions.
Number – fractions	Unit 9	Fractions (2)	8	Problem solving – fraction of a quantity (2)	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.

Strand	Unit	Lesson number	Lesson title	National curriculum objective	Power Up specifics	
Number – fractions (including decimals)	Unit 10	Decimals (1)	1	Tenths (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 digits in a 3-digit number minus 2- or 3-digit number column subtractions with exchanges.
Number – fractions (including decimals)	Unit 10	Decimals (1)	2	Tenths (2)	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 (including decimals)	Unit 10	Decimals (1)	3	Tenths (3)	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 (including decimals)	Unit 10	Decimals (1)	4	Dividing by 10 (1)	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children explore the relationship between 3, 6, 9 and 12 times-tables.
Number – fractions (including decimals)	Unit 10	Decimals (1)	5	Dividing by 10 (2)	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children explore the relationship between 2, 4, 8 and 12 times-tables.
Number – fractions (including decimals)	Unit 10	Decimals (1)	6	Hundredths (1)	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 (including decimals)	Unit 10	Decimals (1)	7	Hundredths (2)	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.
Number – fractions (including decimals)	Unit 10	Decimals (1)	8	Hundredths (3)	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 (including decimals)	Unit 10	Decimals (1)	9	Dividing by 100	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 (including decimals)	Unit 10	Decimals (1)	10	Dividing by 10 and 100	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	Children write 1- and 2-digit numbers using Roman numerals.

## Textbook 4C (Term 3) overview

Strand	Unit	Lesson number	Lesson title	National curriculum objective	Power Up specifics	
Number – fractions (including decimals)	Unit 11	Decimals (2)	1	Making a whole	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	Children convert numbers in Roman numerals to Arabic numerals.
Number – fractions (including decimals)	Unit 11	Decimals (2)	2	Writing decimals	Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value	Children find out how many Roman numerals each number uses from 1 to 30 and look for a pattern.
Number – fractions (including decimals)	Unit 11	Decimals (2)	3	Comparing decimals	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.
Number – fractions (including decimals)	Unit 11	Decimals (2)	4	Ordering decimals	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)	Unit 11	Decimals (2)	5	Rounding decimals	Compare numbers with the same number of decimal places up to 2 decimal places	Children use four digit cards to form numbers with 1 decimal place, then order from smallest to largest.
Number – fractions (including decimals)	Unit 11	Decimals (2)	6	Halves and quarters	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 from smallest to largest.
Number – fractions (including decimals)	Unit 11	Decimals (2)	7	Problem solving – decimals	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.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 12	Money	1	Pounds and pence	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. Includes litres and kilograms.
Measurement	Unit 12	Money	2	Pounds, tenths and hundredths	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	Ordering 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	Rounding 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	Using rounding to estimate 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 total length using multiplication and division with decimal and whole numbers.
Measurement	Unit 12	Money	6	Problem solving – pounds and pence	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.
Measurement	Unit 12	Money	7	Problem solving – multiplication and 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 word problems to work out total volumes using multiplication and addition with decimal and whole numbers.
Measurement	Unit 12	Money	8	Solving two-step problems	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 12	Money	9	Problem solving – money	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	1	Units of time (1)	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	2	Units of time (2)	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.
Measurement	Unit 13	Time	3	Converting times (1)	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 cards to make a second amount to add to the first amount. Then convert into litres and millilitres.
Measurement	Unit 13	Time	4	Converting times (2)	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 cards to make a second amount to add to the first amount. Then convert into kilograms and grams.
Measurement	Unit 13	Time	5	Problem solving – units of time	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 cards to make a second amount to add to the first amount. Then convert into pounds and pence.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Statistics	Unit 14	Statistics	1	Charts and tables (1)	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.
Statistics	Unit 14	Statistics	2	Charts and tables (2)	Count backwards through 0 to include negative numbers	Children count back in 2s, then 5s, from 20 to -20 and explore numbers in the count.
Statistics	Unit 14	Statistics	3	Line graphs (1)	Count backwards through 0 to include negative numbers	Children order mixed positive and negative numbers from a limited range of -100 to 100 into ascending and descending order.
Statistics	Unit 14	Statistics	4	Line graphs (2)	Recall multiplication and division facts for multiplication tables up to $12 \times 12$	Children complete a crossnumber puzzle with 2- and 3-digit numbers found by solving clues such as the 8th multiple of 5, the 9th multiple of 4, etc.
Statistics	Unit 14	Statistics	5	Problem solving – graphs	Order and compare numbers beyond 1,000	Children use digit cards to make some inequality statements using 4-digit numbers.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	1	Identifying angles	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 number, with a target of reaching the answer of 6,174.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	2	Comparing and ordering angles	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.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	3	Identifying regular and irregular shapes	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. Identify result as centimetres, tenths of a centimetre, 100ths of a centimetre etc.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	4	Classifying triangles	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.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	5	Classifying and comparing quadrilaterals	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 to fractions and fractions to decimals then order from smallest to largest. Decimals have 1 decimal place.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	6	Deducing facts about shapes	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 to fractions and fractions to decimals then order from smallest to largest. Decimals have 2 decimal places.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	7	Lines of symmetry inside a shape	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.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	8	Lines of symmetry outside a shape	Recognise and show, using diagrams, families of common equivalent fractions	Children sort fractions into groups of equivalent fractions.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	9	Completing a symmetric figure	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.
Geometry – properties of shapes	Unit 15	Geometry – angles and 2D shapes	10	Completing a symmetric shape	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.



Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Geometry – position and direction	Unit 16	Geometry – position and direction	1	Describing position (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 use dominoes as fractions, with the smaller number as the numerator and the larger number as the denominator, and then sort into those with same denominator. Children add the largest and smallest fractions in each group to look for patterns in the totals.
Geometry – position and direction	Unit 16	Geometry – position and direction	2	Describing position (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 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	3	Drawing on a grid	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	4	Reasoning on a grid	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.
Geometry – position and direction	Unit 16	Geometry – position and direction	5	Moving 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. Children convert amount into pence.
Geometry – position and direction	Unit 16	Geometry – position and direction	6	Describing a movement 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.