

Power Maths WRM Edition Year 3 Power Up progression

Textbook 3A

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – number and place value	Unit 1	Place value within 1,000	1	Represent and partition numbers to 100	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count forwards from 0 in multiples of 10.
Number – number and place value	Unit 1	Place value within 1,000	2	Number line to 100	Identify, represent and estimate numbers using different representations.	Children identify which number representations are between 50 and 60.
Number – number and place value	Unit 1	Place value within 1,000	3	100s	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children match 2-digit numbers written in words to representations which have missing digits.
Number – number and place value	Unit 1	Place value within 1,000	4	Represent numbers to 1,000	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children match 3-digit numbers written in words to representations which have missing digits.
Number – number and place value	Unit 1	Place value within 1,000	5	Partition numbers to 1,000	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count forwards and backwards in 100s between 0 and 1,000 from varying starting points.
Number – number and place value	Unit 1	Place value within 1,000	6	Partition numbers to 1,000 flexibly	Identify, represent and estimate numbers using different representations.	Children represent 324 in different ways.
Number – number and place value	Unit 1	Place value within 1,000	7	100s, 10s and 1s	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children identify the place value of two numbers and identify which is greater.
Number – number and place value	Unit 1	Place value within 1,000	8	Use a number line to 1,000	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children identify different numbers that could be made from three sets of number cards, looking at multiples of 100, 10 and 1.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – number and place value	Unit 1	Place value within 1,000	9	Estimate on a number line to 1,000	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children identify 423 from representations of place value counters.
Number – number and place value	Unit 1	Place value within 1,000	10	Find 1, 10 and 100 more or less	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children identify the missing hundreds in a place value grid, and find all possibilities.
Number – number and place value	Unit 1	Place value within 1,000	11	Compare numbers to 1,000	Compare and order numbers up to 1,000.	Children order pairs of 2-digit and 3-digit numbers using $<$, $>$ or $=$.
Number – number and place value	Unit 1	Place value within 1,000	12	Order numbers to 1,000	Compare and order numbers up to 1,000.	Children order pairs of 3-digit and 4-digit numbers using $<$, $>$ or $=$.
Number – number and place value	Unit 1	Place value within 1,000	13	Count in 50s	Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds.	Children use number bonds to 10 to help work out number bonds to 100.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	1	Use known number bonds	Identify, represent and estimate numbers using different representations.	Children are given a representation of a 3-digit number but the place values are not organised in order.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	2	Add/subtract 1s	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children revisit counting forwards and backwards in 10s and 100s from any number along a number line.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	3	Add/subtract 10s	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children revisit counting forwards and backwards in 50s and 100s from any number along a number line.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	4	Add/subtract 100s	Add and subtract numbers mentally, including: a three-digit number and ones.	Children use digit cards to create a random 3-digit number and a 1-digit number to add to it. They use number bonds to 10 to help.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	5	Spot the pattern	Add and subtract numbers mentally, including: a three-digit number and ones.	Children find a pattern in adding a 3-digit number to 1, 2, 3, 4, etc.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	6	Add 1s across 10	Add and subtract numbers mentally, including: a three-digit number and ones.	Children find a pattern in subtracting 3, 4, 5, 6, etc. from a 3-digit number.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	7	Add 10s across 100	Add and subtract numbers mentally, including: a three-digit number and ones.	Children add or subtract a 1-digit number from a 3-digit number and write a number sentence.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	8	Subtract 1s across 10	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children complete a table to count on and back in multiples of 10, 50 and 100.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	9	Subtract 10s across 100	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count on and back 10, 50 and 100 from a given number.
Number – addition and subtraction	Unit 2	Addition and subtraction (1)	10	Make connections	Add and subtract numbers mentally, including: a three-digit number and tens.	Children use digit cards to create a random 3-digit number and a number of 10s to add to it or subtract from it.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	1	Add two numbers	Add and subtract numbers mentally, including: a three-digit number and tens.	Children add or subtract a 2-digit multiple of 10 from a 3-digit number and check the answer using a number line.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	2	Subtract two numbers	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children create six different 3-digit numbers from the digits 2, 5 and 9 and place them on a number line to 1,000.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	3	Add two numbers (across 10)	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children use a set of place value cards to create 3-digit numbers which meet given conditions, e.g. make a number close to 500.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	4	Add two numbers (across 100)	Compare and order numbers up to 1,000.	Children use three different digit cards to make as many 3-digit numbers as they can and think about how to make a multiple of 5 and an even number.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	5	Subtract two numbers (across 10)	Identify, represent and estimate numbers using different representations.	Children identify marked positions on a 0–1,000 number line and estimate the numbers.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	6	Subtract two numbers (across 100)	Identify, represent and estimate numbers using different representations.	Children are given mixed representations of 100s, 10s and 1s, and match them to given instructions.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	7	Add a 3-digit and a 2-digit number	Identify, represent and estimate numbers using different representations.	Children have mixed representations of 100s, 10s and 1s, and work out the total.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	8	Subtract a 2-digit number from a 3-digit number	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children revise counting in multiples of 5 and 10.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	9	Complements to 100	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children revise counting in multiples of 2 and 3 using a 100 square.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	10	Estimate answers	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children focus on $\times 2$, $\times 5$ and $\times 10$ facts as a revision of multiplication facts.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	11	Inverse operations	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count in multiples of 2 forwards and backwards.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	12	Problem solving (1)	Add and subtract numbers mentally, including: a three-digit number and hundreds.	Children use digit cards to create two random 3-digit numbers and then write out addition and subtraction number sentences.
Number – addition and subtraction	Unit 3	Addition and subtraction (2)	13	Problem solving (2)	Add and subtract numbers mentally, including: a three-digit number and hundreds.	Children randomly pick a 3-digit number and another 3-digit number to add or subtract.
Number – multiplication and division	Unit 4	Multiplication and division (1)	1	Multiplication – equal groups	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children are given a range of 3-digit plus 2-digit additions and state if they are correct or incorrect.
Number – multiplication and division	Unit 4	Multiplication and division (1)	2	Use arrays	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children are given a range of 3-digit minus 2-digit subtractions and state if they are correct or incorrect.
Number – multiplication and division	Unit 4	Multiplication and division (1)	3	Multiples of 2	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children work with number palindromes, and use three sets of 0–9 digit cards to make all palindromes between 101 and 199.
Number – multiplication and division	Unit 4	Multiplication and division (1)	4	Multiples of 5 and 10	Compare and order numbers up to 1,000.	Children order a set of 3-digit numbers with similar digits, e.g. 3, 5 and 6. They then write inequality statements about two numbers in the set.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – multiplication and division	Unit 4	Multiplication and division (1)	5	Share and group	Compare and order numbers up to 1,000.	Children use the digits 7, 4 and 9 to create 3-digit numbers, then order the numbers from smallest to largest.
Number – multiplication and division	Unit 5	Multiplication and division (2)	1	Multiply by 3	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	Children identify which circles have half shaded.
Number – multiplication and division	Unit 5	Multiplication and division (2)	2	Divide by 3	Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.	Children generate random 3-digit numbers to add or subtract.
Number – multiplication and division	Unit 5	Multiplication and division (2)	3	The 3 times-table	Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.	Children generate two 3-digit numbers and subtract the smallest from the greatest number.
Number – multiplication and division	Unit 5	Multiplication and division (2)	4	Multiply by 4	Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.	Two players make a 3-digit number and subtract the numbers to get as close to 500 as possible.
Number – multiplication and division	Unit 5	Multiplication and division (2)	5	Divide by 4	Add and subtract numbers mentally including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds.	Children complete different formats of the 100 square with missing crosses, using numbers up to 1,000.
Number – multiplication and division	Unit 5	Multiplication and division (2)	6	The 4 times-table	Add and subtract numbers mentally including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds.	Children complete missing numbers in addition pyramids, using both addition and subtraction with 2-digit and 3-digit numbers.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – multiplication and division	Unit 5	Multiplication and division (2)	7	Multiply by 8	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children identify a number between 0 and 1,000 from mixed clues.
Number – multiplication and division	Unit 5	Multiplication and division (2)	8	Divide by 8	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count forwards and backwards in multiples of 2 and 4 and look for patterns whilst finding missing numbers on number tracks.
Number – multiplication and division	Unit 5	Multiplication and division (2)	9	The 8 times-table	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count in multiples of 2 and 3, identifying which numbers are in both counts and the matching multiplication facts.
Number – multiplication and division	Unit 5	Multiplication and division (2)	10	Problem solving – multiplication and division (1)	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count in multiples of 2, 3 and 4, identifying which numbers are in all three counts and the matching multiplication facts.
Number – multiplication and division	Unit 5	Multiplication and division (2)	11	Problem solving – multiplication and division (2)	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children complete a table to show 4 more/less and 8 more/less than given 2-digit numbers.
Number – multiplication and division	Unit 5	Multiplication and division (2)	12	Understand divisibility (1)	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children focus on linked facts from 3, 4 and 5 times-tables.
Number – multiplication and division	Unit 5	Multiplication and division (2)	13	Understand divisibility (2)	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children complete number sentences using the same number in the 2, 4 and 8 times-table and look for patterns.

Textbook 3B

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – multiplication and division	Unit 6	Multiplication and division (3)	1	Multiples of 10	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children find starting numbers to count in multiples of 4, 8 and 50 in order to achieve given finish numbers.
Number – multiplication and division	Unit 6	Multiplication and division (3)	2	Related calculations	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children pick a number from a dart board to complete multiplications in the 3, 4 and 8 times-tables.
Number – multiplication and division	Unit 6	Multiplication and division (3)	3	Reasoning about multiplication	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count forwards and backwards in multiples of 4 and 8 and look for patterns whilst finding missing numbers on number tracks.
Number – multiplication and division	Unit 6	Multiplication and division (3)	4	Multiply 2-digits by 1-digit – no exchange	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children focus on recall of the 3, 4 and 8 times-tables to create balanced number sentences.
Number – multiplication and division	Unit 6	Multiplication and division (3)	5	Multiply 2-digits by 1-digit – exchange	Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens.	Children use digit cards to create a random 3-digit number and a 2-digit number to add to it or subtract from it. They repeat with different numbers, then sort the calculations into those done best mentally and those done best using column method.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – multiplication and division	Unit 6	Multiplication and division (3)	6	Expanded written method	Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.	Children pick a 3- or 4-digit starting number (not above 1,000) and use darts to find a 2- or 3-digit multiple of 10 to add or subtract in order to get as close to 500 as possible.
Number – multiplication and division	Unit 6	Multiplication and division (3)	7	Link multiplication and division	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children complete multiplication grids using the 3, 4 and 8 times-tables, then write division statements to go with these facts.
Number – multiplication and division	Unit 6	Multiplication and division (3)	8	Divide 2-digits by 1-digit – no exchange	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children complete a multiplication puzzle grid, where the product is supplied but not all the multipliers/multiplicands.
Number – multiplication and division	Unit 6	Multiplication and division (3)	9	Divide 2-digits by 1-digit – flexible partitioning	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children use the 3 times-table to help multiply by 30.
Number – multiplication and division	Unit 6	Multiplication and division (3)	10	Divide 2-digits by 1-digit with remainders	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children use the 3, 4 and 8 times-tables to help multiply by 300, 400 and 800.
Number – multiplication and division	Unit 6	Multiplication and division (3)	11	How many ways?	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children sort numbers up to 100 into sorting circles to show if divisible by 3, 4 or neither.
Number – multiplication and division	Unit 6	Multiplication and division (3)	12	Problem solving – mixed problems (1)	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children sort numbers up to 100 into sorting circles to show if divisible by 3, 4, 8 or none.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – multiplication and division	Unit 6	Multiplication and division (3)	13	Problem solving – mixed problems (2)	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children use $<$, $>$ or $=$ to make multiplication sentences true, using 2, 3, 4, 5 and 8 times-tables.
Measurement	Unit 7	Length and perimeter	1	Measure in m and cm	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children identify the missing digits in a 3-digit number from clues.
Measurement	Unit 7	Length and perimeter	2	Measure in cm and mm	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children use digit cards on a place value grid to achieve different targets, such as largest number or number closest to 750.
Measurement	Unit 7	Length and perimeter	3	Metres, centimetres and millimetres	Solve problems, including missing number problems, involving multiplication and division.	Children find missing numbers in multiplication and division calculations for known times-tables.
Measurement	Unit 7	Length and perimeter	4	Equivalent lengths (m and cm)	Solve problems, including missing number problems, involving multiplication and division.	Children find missing numbers in multiplication and division calculations for known times-tables presented in balance scales format.
Measurement	Unit 7	Length and perimeter	5	Equivalent lengths (mm and cm)	Solve problems, including missing number problems, involving multiplication and division.	Children find missing numbers in mixed multiplication and division calculations for known times-tables presented in balance scales format.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 7	Length and perimeter	6	Compare lengths	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.	Children use part-whole models to find answer to multiplication calculations.
Measurement	Unit 7	Length and perimeter	7	Add lengths	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.	Children use part-whole models to find answer to multiplication calculations.
Measurement	Unit 7	Length and perimeter	8	Subtract lengths	Identify, represent and estimate numbers using different representations.	Children use clues to estimate a number on a number line.
Measurement	Unit 7	Length and perimeter	9	Measure perimeter	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children use the digits 6, 4 and 2 to make a 3-digit number, then work out 1, 10 and 100 more/less.
Measurement	Unit 7	Length and perimeter	10	Calculate perimeter	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children solve a missing number problem to using their knowledge of perimeter.
Measurement	Unit 7	Length and perimeter	11	Problem solving – length	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children are given various lengths of ribbon in metres and centimetres and find how much was cut from each piece if they were 5 m to begin with.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – fractions	Unit 8	Fractions (1)	1	Understand the denominator of unit fractions	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children revisit counting in multiples of 2, 5 and 10 forwards and backwards by finding missing numbers on number tracks.
Number – fractions	Unit 8	Fractions (1)	2	Compare and order unit fractions	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children focus on recall of 2, 5 and 10 multiplication facts and division facts.
Number – fractions	Unit 8	Fractions (1)	3	Understand the numerator of non-unit fractions	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children balance division facts in 3, 4, 5, 6 and 8 times-tables using $<$, $>$ and $=$.
Number – fractions	Unit 8	Fractions (1)	4	Understand the whole	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children find the missing digit or digits in a 3-digit plus 3-digit column addition.
Number – fractions	Unit 8	Fractions (1)	5	Compare and order non-unit fractions	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children find the missing digit or digits in a 3-digit minus 3-digit column subtraction.
Number – fractions	Unit 8	Fractions (1)	6	Divisions on a number line	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children find the missing digit or digits in a mixture of addition and subtraction using 3-digit numbers.
Number – fractions	Unit 8	Fractions (1)	7	Count in fractions on a number line	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children find different combinations of 2D and 3D shapes to complete a table.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – fractions	Unit 8	Fractions (1)	8	Equivalent fractions as bar models	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children find different combinations of four different sports over four different days.
Number – fractions	Unit 8	Fractions (1)	9	Equivalent fractions on a number line	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children focus on counting in 100s in centimetres and metres.
Number – fractions	Unit 8	Fractions (1)	10	Equivalent fractions	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count forwards in 10s and 100s in millimetres, centimetres and metres.
Measurement	Unit 9	Mass	1	Use scales	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	Children count forwards in quarters, halves and thirds along a number line.
Measurement	Unit 9	Mass	2	Measure mass	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children work out the amount of money different shapes represent, using addition, subtraction, division and multiplication.
Measurement	Unit 9	Mass	3	Measure mass in kilograms and grams	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	Children use bar models to find tenths and fifths of £20.
Measurement	Unit 9	Mass	4	Equivalent masses	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	Children work out $\frac{1}{2}$ and $\frac{1}{4}$, $\frac{1}{3}$ and $\frac{1}{6}$, $\frac{1}{4}$ and $\frac{1}{8}$ of given amounts to see patterns.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 9	Mass	5	Compare mass	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	Children find quarters, thirds and sixths, and look for connections.
Measurement	Unit 9	Mass	6	Add and subtract mass	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.	Children multiply three numbers together, using commutativity and associativity to find answers mentally.
Measurement	Unit 9	Mass	7	Problem solving – mass	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Children investigate missing numbers in representations of 10s and 1s and recognise that 0 can be used in both.
Measurement	Unit 10	Capacity	1	Measure capacity and volume in litres and millilitres	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.	Children use number facts to help calculate $78 \div 3$.
Measurement	Unit 10	Capacity	2	Measure in litres and millilitres	Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems.	Children are given sizes, and work out how many times taller or longer something is (positive integer scaling).

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 10	Capacity	3	Equivalent capacities and volumes (litres and millilitres)	Recognise and show, using diagrams, equivalent fractions with small denominators.	Children are given some equivalent fractions and are asked to check and tick true or false.
Measurement	Unit 10	Capacity	4	Compare capacity and volume	Recognise and show, using diagrams, equivalent fractions with small denominators.	Children find two equivalences for a given fraction in different representations.
Measurement	Unit 10	Capacity	5	Add and subtract capacity and volume	Compare and order unit fractions, and fractions with the same denominators.	Children compare fractions with the help of a fractions wall and complete using $<$, $>$ and $=$.
Measurement	Unit 10	Capacity	6	Problem solving – capacity	Compare and order unit fractions, and fractions with the same denominators.	Children prove or disprove given comparison fraction statements using fraction strips.

Textbook 3C

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – fractions	Unit 11	Fractions (2)	1	Add fractions	Identify, represent and estimate numbers using different representations.	Children are given three different representations of a fraction, and say how they are the same and how they are different.
Number – fractions	Unit 11	Fractions (2)	2	Subtract fractions	Identify, represent and estimate numbers using different representations.	Children find the odd one out in a set of representations of a number with the same hundreds place value.
Number – fractions	Unit 11	Fractions (2)	3	Partition the whole	Identify, represent and estimate numbers using different representations.	Children are given two representations of the same number, and create a third one.
Number – fractions	Unit 11	Fractions (2)	4	Problem solving – add and subtract fractions	Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds.	Children complete a puzzle with additions including 3-digit numbers. Children calculate mentally where possible.
Number – fractions	Unit 11	Fractions (2)	5	Unit fractions of a set of objects	Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds.	Children complete a puzzle with additions and subtractions involving 3-digit numbers.
Number – fractions	Unit 11	Fractions (2)	6	Non-unit fractions of a set of objects	Add and subtract fractions with the same denominator within one whole.	Children complete mixed addition and subtraction of fractions, sometimes with a total of 1.
Number – fractions	Unit 11	Fractions (2)	7	Reason with fractions of an amount	Add and subtract fractions with the same denominator within one whole.	Children work out missing fractions in mixed addition and subtraction calculations, sometimes with a total of 1.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Number – fractions	Unit 11	Fractions (2)	8	Problem solving – fractions of measures	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children focus on counting in the coin values, 2p, 5p, 10p, 20p, 100p, on number tracks and find the value of each track.
Measurement	Unit 12	Money	1	Pounds and pence	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children complete a table to add pounds and pence.
Measurement	Unit 12	Money	2	Convert pounds and pence	Identify, represent and estimate numbers using different representations.	Children use coins to represent the same amount of money in different ways.
Measurement	Unit 12	Money	3	Add money	Identify, represent and estimate numbers using different representations.	Children use $<$, $>$ and $=$ to show if amounts of money in coins are less than, equal to or greater than £1.
Measurement	Unit 12	Money	4	Subtract money	Identify, represent and estimate numbers using different representations.	Children use $<$, $>$ and $=$ to show if amounts of money in coins are less than, equal to or greater than £1.
Measurement	Unit 12	Money	5	Find change	Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.	Children complete a puzzle with additions and subtractions involving 3-digit numbers.
Measurement	Unit 13	Time	1	Roman numerals to 12	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children complete multiplication grid for $\times 1$, $\times 2$, $\times 3$, $\times 4$, $\times 5$ and $\times 8$.
Measurement	Unit 13	Time	2	Tell the time to 5 minutes	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.	Children complete a puzzle with multiplication and division involving 2- or 3-digit number answers.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 13	Time	3	Tell the time to the minute	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.	Children complete a puzzle involving multiplying three 1-digit numbers together.
Measurement	Unit 13	Time	4	Read time on a digital clock	Recognise and show, using diagrams, equivalent fractions with small denominators.	Children find the odd one out in a set of representations of a fraction.
Measurement	Unit 13	Time	5	Use am and pm	Recognise and show, using diagrams, equivalent fractions with small denominators.	Children write the fractions represented with fraction strips and match each to its equivalent fraction.
Measurement	Unit 13	Time	6	Years, months and days	Recognise and show, using diagrams, equivalent fractions with small denominators.	Children use a range of different fractions and assorted clues to find a sequence.
Measurement	Unit 13	Time	7	Days and hours	Solve problems, including missing number problems, involving multiplication and division.	Children find the odd calculation out in a set of multiplications, sometimes involving three numbers.
Measurement	Unit 13	Time	8	Hours and minutes – start and end times	Solve problems, including missing number problems, involving multiplication and division.	Children use a set of 0–9 digit cards to make 2-digit numbers which include multiples of 2, 3, 4, 5 and 8.
Measurement	Unit 13	Time	9	Hours and minutes – durations	Solve problems, including missing number problems, involving multiplication and division.	Children use a set of 0–9 digit cards to make 1-, 2- and 3-digit numbers which include multiples of 2, 3, 4, 8 and 50.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Measurement	Unit 13	Time	10	Hours and minutes – compare durations	Estimate the answer to a calculation and use inverse operations to check answers.	Children estimate answers mentally for addition and subtraction calculations with 3- and 4-digit numbers.
Measurement	Unit 13	Time	11	Minutes and seconds	Estimate the answer to a calculation and use inverse operations to check answers.	Children complete addition and subtraction calculations then use the inverse operation to check the answer.
Measurement	Unit 13	Time	12	Solve problems with time	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children use digit cards to create three 3-digit numbers, adding two together to make the third.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	1	Turns and angles	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children use digit cards to create three 3-digit numbers, where one subtracts from another to make the third. Children may need to adjust the numbers to make it work.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	2	Right angles in shapes	Compare and order numbers up to 1,000.	Children arrange digit cards in 3 by 3 array. They identify six 3-digit numbers by reading across and down the square, then order the numbers in ascending order.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	3	Compare angles	Compare and order numbers up to 1,000.	Children arrange digit cards in a 3 by 3 array. They identify six 3-digit numbers by reading across and down the square, then answer questions to find the smallest, greatest, closest to 300, etc.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	4	Measure and draw accurately	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children use place value clues to find a sequence of numbers.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	5	Horizontal and vertical	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Children use addition and subtraction clues with 3-digit numbers to find a sequence of numbers.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	6	Parallel and perpendicular	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count forwards and backwards in 100s up to 1,000 in grams.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	7	Recognise, draw and describe 2D shapes	Compare and order numbers up to 1,000.	Children order amounts in mixed mass units (grams and kilograms) in ascending order.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	8	Recognise and describe 3D shapes	Solve problems, including missing number problems, involving multiplication and division.	Children use multiplication and division clues with 1-digit and 2-digit numbers to find a sequence of numbers.
Geometry – properties of shapes	Unit 14	Angles and properties of shapes	9	Make 3D shapes	Solve problems, including missing number problems, involving multiplication and division.	Children use multiplication with 2-digit and 1-digit numbers to create a sequence of cards.

Strand	Unit		Lesson number	Lesson title	National curriculum objective	Power Up specifics
Statistics	Unit 15	Statistics	1	Interpret pictograms (1)	Solve problems, including missing number problems, involving multiplication and division.	Children use all four operations to find a sequence of cards.
Statistics	Unit 15	Statistics	2	Interpret pictograms (2)	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count forwards in multiples of 100 in millilitres and stop when they pass 1,000 ml.
Statistics	Unit 15	Statistics	3	Draw pictograms	Compare and order numbers up to 1,000.	Children put capacities in millilitres and litres in ascending order.
Statistics	Unit 15	Statistics	4	Interpret bar charts (1)	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.	Children solve multiplication and division word problems using real-life contexts.
Statistics	Unit 15	Statistics	5	Interpret bar charts (2)	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count in multiples of 4 and 8, identifying which numbers are in both counts.
Statistics	Unit 15	Statistics	6	Collect and represent data in a bar chart	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Children count backwards in multiples of 100 in millilitres and stop when they pass 100 ml.
Statistics	Unit 15	Statistics	7	Simple two-way tables	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.	Children look for patterns in given numbers to provide table headings.