

Mathematics Mastery curriculum map

Autumn term

Assessment maps outline the content covered in every New PUMA test and show which content from each Mathematics Mastery unit and NC content domain is assessed.

The units at the top of each table denote prior learning.

| MM unit | NC Content Domain ref | Year 1 Autumn | Marks |
|---|-----------------------|--|-------|
| Prior year content | | | |
| Early years goals | ELGN | Count reliably with numbers from 1 to 20 | 3 |
| | ELGN | Using quantities and objects, they add and subtract two one-digit numbers and count on or back to find the answer | 1 |
| | ELGSSM | Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems | 2 |
| | ELGSSM | Use everyday language to talk about position to compare objects | 2 |
| | ELGSSM | Use mathematical language to describe shapes | 1 |
| Current year content | | | |
| 1 | 1N2b | Given a number, identify one more and one less | 3 |
| 2 | 1C1 | Represent and use number bonds and related subtraction facts [within 10] | 3 |
| | 1C4 | Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems | 4 |
| 3 | 1G1a | Recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] | 5 |
| | 1G1b | Recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] | 1 |
| 4 | 1N2c | Count, read and write numbers from 1 to 20 in numerals and words | 1 |
| 5 | 1C2a | Add and subtract one-digit and two-digit numbers to 20, including zero [this test only up to 10] | 3 |
| Stretch content leading into following term: Q25 | | | |
| 6 | 1M4c | Recognise and use language relating to days of the week | 1 |

| MM unit | NC Content Domain ref | Year 2 Autumn | Marks |
|---|----------------------------------|--|-------|
| Prior year content | | | |
| Y1: 3 | 1G1a | Recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] | 1 |
| | 1G1b | Recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] | 1 |
| Y1:5 | 1C1 | Represent and use number bonds and related subtraction facts within 20 | 2 |
| Y1: 7 | 1C2a | Add and subtract one-digit and two-digit numbers to 20, including zero | 3 |
| Y1: 8 | 1N1b | Count in multiples of twos, fives and tens | 3 |
| Y1: 10 | 1F1a | Recognise, find and name a half as one of two equal parts of an object, shape or quantity | 1 |
| Y1: 11 | 1M1 | Compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] | 1 |
| | 1M2 | Measure and begin to record the following: lengths and heights | 1 |
| Y1: 12 | 1N2a | Count, read and write numbers to 100 in numerals | 2 |
| Current year content | | | |
| 1 | 2N1 | Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward or backward | 1 |
| | 2N2b | Compare and order numbers from 0 up to 100; use <, > and = signs | 1 |
| | 2N3 | Recognise the place value of each digit in a two-digit number (tens and ones) | 4 |
| 2 | Covered in later terms in Year 2 | | |
| 3 | 2C4 | Solve problems with addition and subtraction: applying their increasing knowledge of mental and written methods | 1 |
| 4 | Covered in later terms in Year 2 | | |
| 5 | 2S1 | Interpret and construct simple pictograms, tally charts, block diagrams and simple tables | 2 |
| | 2S2a | Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity | 1 |
| | 2S2b | Ask and answer questions about totalling and comparing categorical data | 1 |
| 6 | 2C6 | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | 2 |
| Stretch content leading into following term: Q8,19 | | | |
| 3 | 2C4 | Solve problems with addition and subtraction: applying their increasing knowledge of mental and written methods | 1 |
| 8 | 2F1a | Recognise, find, name and write fraction $\frac{3}{4}$ of a shape | 1 |

| MM unit | NC Content Domain ref | Year 3 Autumn | Marks |
|-----------------------------|-----------------------|---|-------|
| Prior year content | | | |
| Y1: 10 | 1F1b | Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | 1 |
| Y2: 1 | 2N1 | Count in steps of 2, 3 and 5, from 0, and in tens from any number, forward or backward | 2 |
| Y2: 3 | 2C3 | Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems | 1 |
| Y2: 4 | 2M2 | Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) | 1 |
| Y2: 6 | 2C6 | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | 1 |
| Y2: 8 | 2F1a | Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity | 3 |
| Y2: 9 | 2C4 | Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods | 3 |
| Y2: 10 | 2M3a | Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value | 2 |
| Y2: 11 | 2G2a | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line | 2 |
| | 2G2b | Identify and describe the properties of 3-D shapes, including the number of vertices and faces | 1 |
| | 2P2 | Use mathematical vocabulary to describe movement, distinguishing between rotation as a turn and in terms of right angles for quarter turns (clockwise and anti-clockwise) | 1 |
| Y2: 14 | 2M2 | Choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels | 1 |
| Y2: 15 | 2C1 | Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 | 1 |
| | 2C2a | Add and subtract numbers mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers | 2 |
| | 2C9a | Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot | 1 |
| Y2: 16 | 2C8 | Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts | 2 |
| | 3C6 | Recall and use multiplication and division facts for the 3 and 4 8 multiplication tables | 2 |
| Current year content | | | |
| 1 | 3N4 | Identify, represent and estimate numbers using different representations | 1 |

| | | | |
|---|----------------------------------|---|---|
| | 3M9a | Add and subtract amounts of money to give change, using both pounds (£) and pence (p) in practical contexts | 2 |
| 2 | 3N1b | Count from 0 in multiples of 4, 8, 50 and 100 | 1 |
| | 3N2a | Compare and order numbers up to 1000 | 1 |
| | 3N2b | Find 10 or 100 more or less than a given number | 1 |
| | 3N3 | Recognise the place value of each digit in a three-digit number (hundreds, tens and ones) | 1 |
| | 3N6 | Solve number problems and practical problems involving 3N1–3N5 | 2 |
| 3 | 3S1 | Interpret and present data using bar charts, pictograms and tables | 2 |
| | 3S2 | Solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts, pictograms and tables | 1 |
| 4 | 3C1 | Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds | 3 |
| | 3C2 | Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | 1 |
| 5 | Covered in later terms in Year 3 | | |
| Stretch content leading into following term: Q12ii,35 | | | |
| 6 | 3C8 | 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 | 1 |
| 12 | 3C6 | Recall and use multiplication and division facts for the 8 multiplication table | 1 |

| MM unit | NC Content Domain ref | Year 4 Autumn | Marks |
|-----------------------------|-----------------------|---|-------|
| Prior year content | | | |
| Y2: 9 | 2C4 | solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods | 1 |
| Y2: 10 | 2M3a | Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value | 1 |
| Y2: 11 | 2G2a | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line | 1 |
| Y2: 12 | 2N6 | Use place values and number facts to solve problems | 1 |
| Y2: 15 | 2C2a | Add and subtract numbers mentally, including: adding three one-digit numbers | 2 |
| Y3: 2 | 3N3 | Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) | 1 |
| | 3N4 | Identify, represent and estimate numbers using different representations | 3 |
| Y3: 3 | 3S1 | Interpret and present data using bar charts, pictograms and tables | 2 |
| | 3S2 | Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables | 1 |
| Y3: 7 | 3C8 | Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects | 2 |
| Y3: 9 | 3F1b | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | 1 |
| | 3F1c | Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators | 1 |
| | 3F2 | Recognise and show, using diagrams, equivalent fractions with small denominators | 2 |
| Y3: 10 | 3G4b | Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle | 2 |
| Y3: 11 | 3M2a | Measure lengths (m/cm/mm) | 1 |
| | 3C4 | Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction | 2 |
| Current year content | | | |
| 1 | 4N1 | Count in multiples of 6, 7, 9, 25 and 1000 | 1 |
| | 4N2a | Order and compare numbers beyond 1000 | 1 |
| | 4N3a | Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones) | 3 |
| | 4N4a | Identify, represent and estimate numbers using different representations | 1 |
| | 4N4b | Round any number to the nearest 10, 100 or 1000 | 2 |
| | 4N6 | Solve number and practical problems that involve 4N1–4N5 and with increasingly large positive numbers | 1 |

| | | | |
|---|----------------------------------|--|---|
| 2 | 4C2 | Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate | 2 |
| | 4C3 | Estimate and use inverse operations to check answers to a calculation | 1 |
| | 4C4 | Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why | 2 |
| 3 | 4C6c | Recognise and use factor pairs and commutativity in mental calculations | 1 |
| | 4C7 | Multiply two-digit and three-digit numbers by a one-digit number using formal written layout | 1 |
| | 4C8 | Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects | 3 |
| 4 | Covered in later terms in Year 4 | | |
| Stretch content leading into later term: Q36b,38 | | | |
| 10 | 4M9 | Calculate different measures, including money in pounds and pence | 2 |

| MM unit | NC Content Domain ref | Year 5 Autumn | Marks |
|---------------------------|-----------------------|--|-------|
| Prior year content | | | |
| Y2: 3 | 2C2 | Add and subtract numbers using concrete objects and pictorial representations, including: two two-digit numbers | 1 |
| Y3: 2 | 3N1b | Count from 0 in multiples of 4, 8, 50 and 100 | 1 |
| | 3N2a | Compare and order numbers up to 1000 | 2 |
| | 3N4 | Identify, represent and estimate numbers using different representations | 1 |
| | 3N6 | Solve number problems and practical problems involving 3N1–3N5 | 2 |
| Y3: 3 | 3S2 | Solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts, pictograms and tables | 2 |
| Y3: 5 | 3C4 | Solve problems including missing number problems, using number facts, place value and more complex addition and subtraction | 2 |
| Y3: 8 | 3M4f | Compare durations of events [for example, to calculate the time taken by particular events or tasks] | 1 |
| Y3: 9 | 3F2 | Recognise and show, using diagrams, equivalent fractions with small denominators | 1 |
| Y3: 10 | 3G3b | Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them | 1 |
| | 3G4b | Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle | 1 |
| Y4: 1 | 4N1 | Count in multiples of 6, 7, 9, 25 and 1000 | 1 |
| | 4N4a | Identify, represent and estimate numbers using different representations | 1 |
| Y4: 2 | 4C4 | Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why | 1 |
| Y4: 3 | 4C6a | Recall multiplication and division facts for multiplication tables up to 12×12 | 4 |
| | 4C7 | Multiply two-digit and three-digit numbers by a one-digit number using formal written layout | 1 |
| | 4C8 | Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects | 1 |
| Y4: 4 | 4S2 | Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs | 1 |
| Y4: 6 | 4F2 | Recognise and show, using diagrams, families of common equivalent fractions | 1 |
| | 4F4 | Add and subtract fractions with the same denominator | 2 |
| Y4: 10 | 4F10b | Solve simple measure and money problems involving fractions and decimals to two decimal places | 1 |
| | 4M5 | Convert between different units of measurement [for example, kilometre to metre; hour to minute] | 1 |

| | | | |
|--|----------------------------------|--|---|
| | 4M9 | Calculate different measures, including money in pounds and pence | 3 |
| Y4: 11 | 4G2a | Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes | 1 |
| Y4: 13 | 4N5 | Count backwards through zero to include negative numbers | 1 |
| Y4: 14 | 5G3b | Identify 3-D shapes, including cubes and other cuboids, from 2-D representations | 2 |
| Current year content | | | |
| 1 | Covered in later terms in Year 5 | | |
| 2 | Covered in later terms in Year 5 | | |
| 3 | 5S1 | Complete, read and interpret information in tables, including timetables | 4 |
| 4 | 5C5a | Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers | 2 |
| | 5C5d | Recognise and use square numbers, and the notation for squared (²) | 1 |
| | 5C6a | Multiply and divide numbers mentally drawing upon known facts | 1 |
| | 5C8b | Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign | 2 |
| 5 | 5M7b | Calculate and compare the area of rectangles (including squares) and estimate the area of non-rectilinear shapes | 3 |
| Stretch content leading into later terms: Q18,28,36 | | | |
| 4 | 5C8b | Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign | 3 |
| 6 | 5F2a | Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements >1 as a mixed number | 1 |
| 8 | 5M9b | Use all four operations to solve problems involving measure [for example, length] using decimal notation, including scaling | 1 |

| MM unit | NC Content Domain ref | Year 6 Autumn | Marks |
|---------------------------|-----------------------|--|-------|
| Prior year content | | | |
| Y3: 2 | 3N1b | Count from 0 in multiples of 4, 8, 50 and 100 | 1 |
| Y3: 4 | 3C2 | Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction | 1 |
| Y3: 9 | 3F1b | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | 1 |
| | 3F3 | Compare and order unit fractions and fractions with the same denominators | 1 |
| Y3: 10 | 3G4b | Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle | 1 |
| Y4: 1 | 4N6 | Solve number and practical problems that involve 4N1–4N5 and with increasingly large positive numbers | 1 |
| Y4: 2 | 4C2 | Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate | 3 |
| | 4C3 | Estimate and use inverse operations to check answers to a calculation | 2 |
| Y4: 5 | 4C6a | Recall multiplication and division facts for multiplication tables up to 12×12 | 3 |
| Y4: 6 | 4F2 | Recognise and show, using diagrams, families of common equivalent fractions | 2 |
| Y4: 10 | 4M2 | Estimate different measures, including money in pounds and pence | 1 |
| | 4M9 | Calculate different measures, including money in pounds and pence | 1 |
| Y5: 1 | 5N3a | Determine the value of each digit in numbers up to 1,000,000 | 2 |
| | 5N6 | Solve number problems and practical problems that involve 5N1–5N5 | 3 |
| Y5: 2 | 5C2 | Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) | 1 |
| Y5: 3 | 5M4 | Solve problems involving converting between units of time | 1 |
| | 5S2 | Solve comparison, sum and difference problems using information presented in a line graph | 4 |
| Y5: 4 | 5C5a | Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers | 1 |
| | 5C5b | Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers | 1 |
| | 5C6a | Multiply and divide numbers mentally drawing upon known facts | 1 |
| | 5C7b | Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context | 1 |
| Y5: 10 | 5M5 | Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] | 1 |

| | | | |
|--|----------------------------------|--|---|
| Y5: 12 | 6G2b | Describe simple 3-D shapes | 2 |
| Current year content | | | |
| 1 | 6N6 | Solve number problems and practical problems that involve 6N2–6N5 | 2 |
| | 6C4 | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why | 1 |
| 2 | 6C5 | Identify common factors, common multiples and prime numbers | 1 |
| | 6C7a | Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication | 1 |
| | 6C7c | Divide numbers up to 4 digits by a two-digit whole number using the formal written method of short division where appropriate, interpreting remainders according to the context | 2 |
| 3 | 6C8 | Solve problems involving addition, subtraction, multiplication and division | 3 |
| 4 | 6F2 | Use common factors to simplify fractions; use common multiples to express fractions in the same denomination | 1 |
| | 6F3 | Compare and order fractions, including fractions >1 | 1 |
| 5 | Covered in later terms in Year 6 | | |
| 10 | 6R4 | Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples [using fractions covered in Y3 - tenths] | 1 |
| Stretch content leading into following term: Q18,22,23,37 | | | |
| 4 | 6F4 | Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions | 2 |
| 7 | 6F11 | Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts | 1 |
| 8 | 6M5 | Use, read, write and convert between standard units, converting measurements of mass from a smaller unit of measure to a larger unit, and vice versa, using decimal notation of up to three decimal places | 1 |
| 10 | 6R1 | Solve problems involving the relative sizes of two quantities, where missing values can be found by using integer multiplication and division facts | 2 |

Mathematics Mastery curriculum map

Spring term

Assessment maps outline the content covered in every New PUMA test and show which content from each Mathematics Mastery unit and NC content domain is assessed.

The units at the top of each table denote prior learning.

| MM unit | NC Content Domain ref | Year 1 Spring | Marks |
|---|-----------------------------------|--|-------|
| Prior year content | | | |
| Early years goals | ELGSSM | Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems | 2 |
| Current year, prior term content | | | |
| 3 | 1G1a | Recognise and name common 2-D shapes [e.g. rectangles (including squares), circles and triangles] | 1 |
| | 1G1b | Recognise and name common 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres] | 1 |
| Current year, current term content | | | |
| 6 | 1M4c | Recognise and use language relating to dates, including days of the week, weeks, months and years | 1 |
| 7 | 1C1 | Represent and use number bonds and related subtraction facts within 20 | 2 |
| | 1C2a | Add and subtract one-digit and two-digit numbers to 20, including zero | 3 |
| | 1C2b | Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs | 1 |
| | 1C4 | Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = [] - 9$ | 3 |
| 8 | 1N1b | Count in multiples of two, five and ten | 7 |
| 9 | Assessed in summer term of Year 1 | | |
| 10 | 1F1a | Recognise, find and name a half as one of two equal parts of an object, shape or quantity | 2 |
| 11 | 1M2 | Measure and begin to record the following: lengths and heights | 1 |
| Stretch content leading into following term: Q7,15,17,19,20,25 | | | |
| 12 | 1N1a | Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number | 2 |
| | 1N2a | Count, read and write numbers to 100 in numerals | 3 |
| 16 | 1M1 | Compare, describe and solve practical problems for: capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] | 1 |

| MM unit | NC Content Domain ref | Year 2 Spring | Marks |
|---|-----------------------------------|--|-------|
| Prior year content | | | |
| Y1: 3 | 1G1b | Recognise and name common 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres] | 1 |
| Y1: 13 | 1C2a | Add and subtract one-digit and two-digit numbers to 20, including zero | 1 |
| Current year, prior term content | | | |
| 1 | 2N2b | Compare and order numbers from 0 up to 100; use <, > and = signs | 4 |
| | 2N6 | Use place value and number facts to solve problems | 2 |
| 3 | 2C3 | Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems | 1 |
| 5 | 2S2b | Ask and answer questions about totalling and comparing categorical data | 2 |
| 6 | 2C6 | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | 3 |
| Current year, current term content | | | |
| 7 | Assessed in summer term of Year 2 | | |
| 8 | 2F1a | Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity | 3 |
| | 2F2 | Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ | 1 |
| 9 | 2C1 | Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 | 1 |
| | 2C2a | Add and subtract numbers using pictorial representations and mentally, including: adding three one-digit numbers | 2 |
| 10 | 2M3a | Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value | 2 |
| | 2M3b | Find different combinations of coins that equal the same amounts of money | 1 |
| | 2M9 | Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | 1 |
| 11 | 2G2a | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line | 3 |
| | 2G3 | Identify 2-D shapes on the surface of 3-D shapes, [e.g. a circle on a cylinder and a triangle on a pyramid] | 1 |
| Stretch content leading into following term: Q10 | | | |
| 9 | 2C4 | Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods (<i>outside 100</i>) | 1 |

| MM unit | NC Content Domain ref | Year 3 Spring | Marks |
|---|-----------------------|---|-------|
| Prior year content | | | |
| Y2: 1 | 2N3 | Recognise the place value of each digit in a two-digit number (tens, ones) | 1 |
| Y2: 7 | 2M4b | Compare and sequence intervals of time | 1 |
| Y2: 8 | 2F1a | Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity | 1 |
| Y2: 9 | 2C4 | Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods | 1 |
| Y2: 10 | 2M3a | Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value | 1 |
| | 2M9 | Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | 1 |
| Y2: 11 | 2G2a | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line | 2 |
| Y2: 12 | 2N6 | Use place value and number facts to solve problems | 2 |
| Y2: 16 | 2C8 | Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | 2 |
| Current year, prior term content | | | |
| 2 | 3N2a | Read and write numbers up to 1000 in numerals and in words | 1 |
| | 3N3 | Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) | 1 |
| 3 | 3S1 | Interpret and present data using bar charts, pictograms and tables | 2 |
| | 3S2 | Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables | 1 |
| 4 | 3C2 | Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | 2 |
| | 3C3 | Estimate the answer to a calculation and use inverse operations to check answers | 1 |
| 5 | 3M7 | Measure the perimeter of simple 2-D shapes | 3 |
| Current year, current term content | | | |
| 6 | 3C6 | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables | 1 |
| 7 | 3C7 | Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times | 2 |

| | | | |
|--|------|---|---|
| | | one-digit numbers, using mental and progressing to formal written methods | |
| | 3C8 | Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects | 4 |
| 8 | 3M4f | Compare durations of events [e.g. to calculate the time taken by particular events or tasks] | 1 |
| 9 | 3F1b | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | 3 |
| | 3F2 | Recognise and show, using diagrams, equivalent fractions with small denominators | 2 |
| | 3F3 | Compare and order unit fractions and fractions with the same denominators | 1 |
| | 3F4 | Add and subtract fractions with the same denominator within one whole [e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] | 1 |
| Stretch content leading into following term: Q7,15,17,21,23,31,32 | | | |
| 12 | 3N1b | Count from zero in multiples of 4, 8, 50 and 100 | 1 |
| 13 | 4N3a | recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) (Y4 NC) | 1 |
| | 3F1a | Count up and down in tenths (<i>decimalised</i>) | 2 |
| <i>Questions containing content taught by Y3 spring term, but included in stretch section as they require mathematics within a multi-step problem.</i> | 3M9a | Add and subtract amounts of money to give change, using both pounds (£) and pence (p) in practical contexts | 1 |
| | 3F10 | Solve problems that involve 3F1–3F4 | 1 |
| | 3C6 | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables | 1 |
| | 3C7 | Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods | 1 |
| | 3C8 | Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects | 1 |

| MM unit | NC Content Domain ref | Year 4 Spring | Marks |
|---|-----------------------------------|--|-------|
| Prior year content | | | |
| Y2: 11 | 2G2a | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line | 1 |
| Y3: 3 | 3S1 | Interpret and present data using bar charts, pictograms and tables | 1 |
| | 3S2 | Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables | 1 |
| Y3: 4 | 3C2 | Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | 1 |
| Y3: 8 | 3M4f | Compare durations of events [e.g. to calculate the time taken by particular events or tasks] | 1 |
| Y3: 9 | 3F1b | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | 1 |
| | 3F1c | Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators | 1 |
| Y3: 11 | 3C4 | Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction | 1 |
| Y3: 12 | 3C6 | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables | 2 |
| Current year, prior term content | | | |
| 1 | 4N1 | Count in multiples of 6, 7, 9, 25 and 1,000 | 3 |
| | 4N4b | Round any number to the nearest 10, 100 or 1,000 | 2 |
| 3 | 4C6b | Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers | 4 |
| | 4C6c | Recognise and use factor pairs and commutativity in mental calculations | 2 |
| | 4C7 | Multiply two-digit and three-digit numbers by a one-digit number using formal written layout | 2 |
| 4 | 4S2 | Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs | 1 |
| Current year, current term content | | | |
| 5 | 4C6a | Recall multiplication and division facts for multiplication tables up to 12×12 | 2 |
| 6 | 4F1 | Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten | 1 |
| | 4F2 | Recognise and show, using diagrams, families of common equivalent fractions | 3 |
| 7 | Assessed in summer term of Year 4 | | |
| 8 | 4F6a | Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ | 1 |
| | 4F6b | Recognise and write decimal equivalents of any number of tenths or hundredths | 5 |



| | | | |
|---|------|--|---|
| | 4F9 | 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 | 1 |
| 9 | 4M7a | Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres | 3 |
| | 4M7b | Find the area of rectilinear shapes by counting squares | 1 |
| Stretch content leading into later term: Q21,25,29 | | | |
| 10 | 4M5 | Convert between different units of measurement [e.g. kilometre to metre; hour to minute] | 1 |
| | 4M9 | Calculate different measures, including money in pounds and pence | 2 |
| 11 | 4G2c | Complete a simple symmetric figure with respect to a specific line of symmetry | 1 |

| MM unit | NC Content Domain ref | Year 5 Spring | Marks |
|---|-----------------------|--|-------|
| Prior year content | | | |
| Y4: 1 | 4N4a | Identify, represent and estimate numbers using different representations | 1 |
| Y4: 2 | 4C3 | Estimate and use inverse operations to check answers to a calculation | 2 |
| | 4C4 | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why | 2 |
| Y4: 6 | 4F4 | Add and subtract fractions with the same denominator | 1 |
| Y4: 8 | 4F6b | Recognise and write decimal equivalents of any number of tenths or hundredths | 1 |
| Y4: 10 | 4M9 | Calculate different measures, including money in pounds and pence | 1 |
| Y4: 11 | 4G2a | Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes | 1 |
| Current year, prior term content | | | |
| 1 | 5N1 | Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 | 2 |
| | 5N2 | Read, write, order and compare numbers to at least 1 000 000 | 3 |
| | 5N6 | Solve number problems and practical problems that involve 5N1–5N5 | 3 |
| 2 | 5C4 | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why | 1 |
| 3 | 5M4 | Solve problems involving converting between units of time | 1 |
| | 5S2 | Solve comparison, sum and difference problems using information presented in a line graph | 4 |
| 4 | 5C5c | Establish whether a number up to 100 is prime | 1 |
| | 5C5d | Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) | 1 |
| | 5C7a | Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers | 1 |
| | 5C7b | Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context | 3 |
| 5 | 5M7b | Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm ²) and square metres (m ²) | 1 |
| Current year, current term content | | | |
| 6 | 5F2a | Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements >1 as a mixed number [e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] | 2 |
| | 5F2b | Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths | 1 |
| | 5F3 | Compare and order fractions whose denominators are all multiples of the same number | 2 |
| | 5F6a | Read and write decimal numbers as fractions [e.g. $0.71 = \frac{71}{100}$] | 2 |

| | | | |
|--|------|---|---|
| | 5F6b | Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents | 1 |
| | 5F8 | Read, write, order and compare numbers with up to three decimal places | 1 |
| 7 | 5G4b | Identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) | 1 |
| 8 | 5F4 | Add and subtract fractions with the same denominators and denominators that are multiples of the same number | 1 |
| | 5F5 | Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams | 2 |
| | 5F10 | Solve problems involving numbers up to three decimal places | 2 |
| | 5F12 | Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 | 2 |
| | 5M9b | Use all four operations to solve problems involving measure [e.g. length] using decimal notation, including scaling | 1 |
| 9 | 5N5 | Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero | 1 |
| | 5P2 | Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed | 1 |
| Stretch content leading into later terms: Q1,5,31ii | | | |
| 10 | 5C6b | Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 | 4 |
| 12 | 5G2a | use the properties of rectangles to deduce related facts and find missing lengths and angles | 1 |

| MM unit | NC Content Domain ref | Year 6 Spring | Marks |
|---|-----------------------|--|-------|
| Prior year content | | | |
| Y4: 4 | 4S1 | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs | 3 |
| Y4: 5 | 4C6a | Recall multiplication and division facts for multiplication tables up to 12×12 | 2 |
| Y4: 12 | 4P3b | Plot specified points and draw sides to complete a given polygon | 1 |
| Y5: 1 | 5N6 | Solve number problems and practical problems that involve 5N1–5N5 | 3 |
| Y5: 4 | 5C5a | Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers | 1 |
| | 5C6a | Multiply and divide numbers mentally, drawing upon known facts | 2 |
| Y5: 5 | 5M7a/b | Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres and Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes | 1 |
| | 5M7a | Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres | 1 |
| Y5: 6 | 5F7 | Round decimals with two decimal places to the nearest whole number and to one decimal place | 1 |
| Y5: 8 | 5F4 | Add and subtract fractions with the same denominator and denominators that are multiples of the same number | 2 |
| | 5F10 | Solve problems involving numbers up to three decimal places | 2 |
| | 5F12 | Solve problems that require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 | 3 |
| Y5: 11 | 5C6b | Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 | 2 |
| | 5C7a | Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers | 1 |
| Y5: 12 | 5G2a | use the properties of rectangles to deduce related facts and find missing lengths and angles | 1 |
| Current year, prior term content | | | |
| 2 | 6C6 | Perform mental calculations, including with mixed operations and large numbers | 1 |
| | 6C7a | Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication | 2 |
| 3 | 6C8 | Solve problems involving addition, subtraction, multiplication and division | 1 |
| 4 | 6F6 | Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction [e.g. $\frac{3}{8}$] | 2 |

| | | | |
|---|-----------------------------------|--|---|
| | 6F11 | Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts | 1 |
| 5 | 6A1 | Express missing number problems algebraically | 1 |
| Current year, current term content | | | |
| 6 | 6N5 | Use negative numbers in context, and calculate intervals across zero | 1 |
| | 6G2b | Describe simple 3-D shapes | 1 |
| | 6P3 | Describe positions on the full co-ordinate grid (all four quadrants) | 1 |
| 7 | Assessed in summer term of Year 6 | | |
| 8 | 6A2 | Use simple formulae | 2 |
| | 6A3 | Generate and describe linear number sequences | 5 |
| | 6M6 | Convert between miles and kilometres | 1 |
| | 6M7a | Recognise that shapes with the same areas can have different perimeters and vice versa | 2 |
| | 6M7b | Calculate the area of parallelograms and triangles | 2 |
| | 6M8a | Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm^3) and cubic metres (m^3), and extending to other units [e.g. mm^3 and km^3] | 1 |
| 9 | 6R2 | Solve problems involving the calculation of percentages [e.g. of measures such as 15% of 360] and the use of percentages for comparison | 1 |
| 10 | 6R4 | solve problems involving unequal sharing and grouping using knowledge of fractions and multiples | 1 |
| Stretch content leading into later terms: Q38,39 | | | |
| | 6C9 | Use knowledge of the order of operations to carry out calculations involving the four operations | 1 |
| | 6N5 | Use negative numbers in context, and calculate intervals across zero | 1 |
| | 6N6 | Solve number problems and practical problems that involve 6N2–6N5 | 1 |

Mathematics Mastery curriculum map

Summer term

Assessment maps outline the content covered in every New PUMA test and show which content from each Mathematics Mastery unit and NC content domain is assessed.

The units at the top of each table denote prior learning.

| MM unit | NC Content Domain ref | Year 1 Summer | Marks |
|---|-----------------------|--|-------|
| Current year, earlier term content | | | |
| 1 | 1N1b | Count in multiples of twos, fives and tens | 1 |
| 3 | 1G1b | Recognise and name common 3-D shapes [e.g.: cuboids (including cubes), pyramids and spheres] | 1 |
| 4 | 1N4 | Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least | 2 |
| 6 | 1M4a | Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times | 3 |
| | 1M4c | Recognise and use language relating to dates, including days of the week, weeks, months and years | 1 |
| | 1P2 | Describe position, directions and movement, including half, quarter and three-quarter turns | 2 |
| 10 | 1F1a | Recognise, find and name a half as one of two equal parts of an object, shape or quantity | 3 |
| | 1F1b | Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | 5 |
| Current year, current term content | | | |
| 12 | 1N2a | Count, read and write numbers to 100 in numerals | 2 |
| 13 | 1C4 | Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = [] - 9$ | 2 |
| 14 | 1M3 | Recognise and know the value of different denominations of coins and notes | 2 |
| 15 | 1C8 | Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher | 4 |
| 16 | 1M2 | Measure and begin to record the following: <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time (hours, minutes, seconds) | 2 |

| MM unit | NC Content Domain ref | Year 2 Summer | Marks |
|---|-----------------------|---|-------|
| Prior year content | | | |
| Y1: 15 | 1C8 | Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher | 1 |
| Current year, earlier term content | | | |
| 1 | 2N2a | Read and write numbers to at least 100 in numerals and in words | 2 |
| | 2N2b | Compare and order numbers from 0 up to 100; use <, > and = signs | 1 |
| | 2N4 | Identify, represent and estimate numbers using different representations, including the number line | 1 |
| 6 | 2C6 | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | 3 |
| 7 | 2M4a | Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times | 2 |
| | 2M4b | Compare and sequence intervals of time | 2 |
| 8 | 2F1a | Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity | 2 |
| | 2F1b | Write simple fractions [e.g. $\frac{1}{2}$ of 6 = 3] | 2 |
| 9 | 2C4 | Solve problems with addition and subtraction: <ul style="list-style-type: none"> applying their increasing knowledge of mental and written methods | 2 |
| 10 | 2M3a | Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value | 1 |
| | 2M9 | Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | 1 |
| 11 | 2G2b | Identify and describe the properties of 3-D shapes including the number of edges, vertices and faces | 2 |
| | 2P1 | Order and arrange combinations of mathematical objects in patterns and sequences | 1 |
| | 2P2 | Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) | 2 |
| Current year, current term content | | | |
| 12 | 2N6 | Use place value and number facts to solve problems | 2 |
| 13 | 2M1 | Compare and order lengths, mass, volume/capacity and record the results using >, < and = | 1 |
| | 2M2 | Choose and use appropriate standard units to estimate and measure temperature (°C) to the nearest appropriate unit using scales/thermometers | 1 |

| | | | |
|----|------|---|---|
| 14 | 2M2 | Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit using scales/thermometers | 1 |
| 15 | 2C9a | Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot | 1 |
| 16 | 2C8 | Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | 3 |
| | 2C9b | Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | 1 |

| MM unit | NC Content Domain ref | Year 3 Summer | Marks |
|---|-----------------------|--|-------|
| Current year, earlier term content | | | |
| 2 | 3N1b | Count from 0 in multiples of 4, 8, 50 and 100 | 2 |
| | 3N2a | Read and write numbers to 1,000 in numerals and in words | 2 |
| | 3N3 | Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) | 2 |
| | 3N4 | Identify, represent and estimate numbers using different representations | 1 |
| 3 | 3S1 | Interpret and present data using bar charts, pictograms and tables | 1 |
| | 3S2 | Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms and tables | 2 |
| 4 | 3C2 | Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | 1 |
| | 3C3 | Estimate the answer to a calculation and use inverse operations to check answers | 2 |
| | 3C4 | Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction | 1 |
| 7 | 3C8 | Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects | 1 |
| 8 | 3M4a | Tell and write the time from an analogue clock; 12-hour clocks | 2 |
| | 3M4e | Know the number of seconds in a minute and the number of days in each month, year and leap year | 1 |
| 9 | 3F1a | Count up and down in tenths | 1 |
| | 3F1b | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | 2 |
| | 3F1c | Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators | 4 |
| | 3F3 | Compare and order unit fractions and fractions with the same denominators | 1 |
| | 3F10 | Solve problems that involve 3F1–3F4 | 1 |
| Current year, current term content | | | |
| 10 | 3G2 | Identify horizontal, vertical lines and pairs of perpendicular and parallel lines | 1 |
| | 3G3a | Draw 2-D shapes | 1 |
| | 3G3b | Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them | 1 |
| | 3G4b | Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle | 6 |
| 11 | 3M1a | Compare lengths (m/cm/mm) | 1 |

| | | | |
|--|--------------------|---|---|
| | 3M2b | Measure mass (kg/g) | 1 |
| | 3M9b | Add and subtract lengths (m/cm/mm) | 1 |
| 12 | 3C6 | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables | 2 |
| | 3C7 | Write and calculate mathematical statements for multiplication and division using the multiplication tables that pupils know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods | 1 |
| 13 | Preparation for Y4 | | |
| Stretch content leading into following term: Q4,20,32b | | | |
| | 3C6 | Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (<i>3 numbers multiplied together</i>) | 1 |
| | 3M4b | Tell and write the time from an analogue clock; 24-hour clocks (<i>24-hour digital time</i>) | 1 |
| <i>Questions containing content taught by Y3 spring term, but included in stretch section as they require mathematics within a multi-step problem.</i> | 3F10 | Solve problems that involve 3F1–3F4 | 1 |

| MM unit | NC Content Domain ref | Year 4 Summer | Marks |
|---|-----------------------|--|-------|
| Prior year content | | | |
| Y2: 11 | 2G2a | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line | 1 |
| Y3: 9 | 3F1b | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | 1 |
| Y3: 10 | 3G4b | Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle | 1 |
| Current year, earlier term content | | | |
| 1 | 4N2a | Order and compare numbers beyond 1,000 | 3 |
| | 4N2b | Find 1,000 more or less than a given number | 1 |
| | 4N4b | Round any number to the nearest 10, 100 or 1,000 | 1 |
| | 4N6 | Solve number and practical problems that involve 4N1–4N5 and with increasingly large positive numbers | 1 |
| 3 | 4C8 | Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects | 3 |
| 4 | 4S1 | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs | 2 |
| | 4S2 | Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs | 1 |
| 6 | 4F4 | Add and subtract fractions with the same denominator | 1 |
| 7 | 4M4a | Read, write and convert time between analogue and digital 12-hour clocks | 1 |
| | 4M4b | Read, write and convert time between analogue and digital 24-hour clocks | 2 |
| | 4M4c | Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days | 2 |
| 8 | 4F7 | Round decimals with one decimal place to the nearest whole number | 2 |
| | 4F8 | Compare numbers with the same number of decimal places up to two decimal places | 1 |
| Current year, current term content | | | |
| 10 | 4F10b | Solve simple measure and money problems involving fractions and decimals to two decimal places | 1 |
| | 4M5 | Convert between different units of measurement [e.g. kilometre to metre; hour to minute] | 2 |
| | 4M9 | Calculate different measures, including money in pounds and pence | 3 |

| | | | |
|--|--------------------|--|---|
| 11 | 4G2a | Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes | 4 |
| | 4G2b | Identify lines of symmetry in 2-D shapes presented in different orientations | 1 |
| 12 | 4P2 | Describe movements between positions as translations of a given unit to the left/right and up/down | 1 |
| | 4P3a | Describe positions on a 2-D grid as co-ordinates in the first quadrant | 3 |
| 13 | 4N3b | Read Roman numerals to 100 (I to C) | 1 |
| | 4N5 | Count backwards through zero to include negative numbers | 3 |
| 14 | Preparation for Y5 | | |
| Stretch content leading into following term: Q30,32b | | | |
| | 4C6b | Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers (<i>including remainders</i>) | 1 |
| <i>Questions containing content taught by Y4 summer term, but included in stretch section as they require mathematics within a multi-step problem.</i> | 4F10b | Solve simple measure and money problems involving fractions and decimals to two decimal places | 1 |

| MM unit | NC Content Domain ref | Year 5 Summer | Marks |
|---|-----------------------|---|-------|
| Prior year content | | | |
| Y4: 1 | 4N4b | Round any number to the nearest 10, 100 or 1,000 | 2 |
| Y4: 2 | 4C4 | Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why | 1 |
| Y4: 5 | 4C6a | Recall multiplication and division facts for multiplication tables up to 12×12 | 2 |
| Y4: 11 | 4G4 | Identify acute and obtuse angles and compare and order angles up to two right angles by size | 1 |
| Current year, earlier term content | | | |
| 1 | 5N1 | Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 | 1 |
| | 5N3b | Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals | 1 |
| | 5N6 | Solve number problems and practical problems that involve 5N1–5N5 | 1 |
| 2 | 5C1 | Add and subtract numbers mentally with increasingly large numbers | 1 |
| 3 | 5M4 | Solve problems involving converting between units of time | 1 |
| | 5S2 | Solve comparison, sum and difference problems using information presented in a line graph | 2 |
| 4 | 5C5a | Identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers | 1 |
| | 5C5b | Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers | 1 |
| | 5C7b | Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context | 1 |
| | 5C8a | Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes | 3 |
| 5 | 5M7a | Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres | 1 |
| | 5M7b | Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) | 2 |
| 6 | 5F3 | Compare and order fractions whose denominators are all multiples of the same number | 1 |
| | 5F6a | Read and write decimal numbers as fractions [e.g. $0.71 = \frac{71}{100}$] | 1 |
| | 5F6b | Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents | 1 |
| | 5F7 | Round decimals with two decimal places to the nearest whole number and to one decimal place | 2 |
| | 5F8 | Read, write, order and compare numbers with up to three places of decimals | 1 |
| 7 | 5G4a | Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles | 3 |

| | | | |
|---|---|--|---|
| | 5G4b | Identify: <ul style="list-style-type: none"> angles at a point and one whole turn (total 360°) angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90° | 1 |
| 8 | 5C8c | Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates | 2 |
| | 5F4 | Add and subtract fractions with the same denominator and denominators that are multiples of the same number | 2 |
| | 5F5 | Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams | 1 |
| | 5F12 | Solve problems that require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 | 2 |
| 9 | 5P2 | Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed | 2 |
| Current year, current term content | | | |
| 10 | 5M5 | Convert between different units of metric measure [e.g. gram and kilogram] | 2 |
| | 5M6 | Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints | 1 |
| 11 | 5C7a | Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers | 4 |
| | 5F10 | Solve problems involving numbers up to three decimal places | 1 |
| 12 | 5G2b | Distinguish between regular and irregular polygons based on reasoning about equal sides and angles | 2 |
| 13 | 5C5d | Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) | 1 |
| | 5M8 | Estimate volume [e.g. using 1 cm ³ blocks to build cuboids (including cubes)] | 1 |
| 14 | consolidation and application opportunities | | |
| Stretch content leading into following term: Q19 | | | |
| | 5F4 | Add and subtract fractions with the same denominator and denominators that are multiples of the same number | 2 |

| MM unit | NC Content Domain ref | Year 6 Summer | Marks |
|---|-----------------------|--|-------|
| Prior year content | | | |
| Y4: 6 | 4F2 | Recognise and show, using diagrams, families of common equivalent fractions | 1 |
| Y5: 1 | 5N4 | Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 | 1 |
| Y5: 2 | 5C2 | Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) | 1 |
| | 5C3 | Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy | 1 |
| Y5: 4 | 5C6a | Multiply and divide numbers mentally, drawing upon known facts | 1 |
| Y5: 11 | 5M9b | Use all four operations to solve problems involving measure [e.g. length] using decimal notation, including scaling | 3 |
| Current year, earlier term content | | | |
| 2 | 6C3 | Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy | 1 |
| | 6C5 | Identify common factors, common multiples and prime numbers | 1 |
| | 6C6 | Perform mental calculations, including with mixed operations and large numbers | 1 |
| | 6C7b | Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context | 1 |
| | 6F9b | Multiply one-digit numbers with up to two decimal places by whole numbers | 1 |
| | 6F9c | Use written division methods in cases where the answer has up to two decimal places | 1 |
| 3 | 6A1 | Express missing number problems algebraically | 1 |
| | 6A4 | Find pairs of numbers that satisfy an equation with two unknowns | 2 |
| | 6C9 | Use their knowledge of the order of operations to carry out calculations involving the four operations | 3 |
| 4 | 6F2 | Use common factors to simplify fractions; use common multiples to express fractions in the same denomination | 1 |
| | 6F3 | Compare and order fractions, including fractions >1 | 1 |
| | 6F4 | Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions | 2 |
| 5 | 6G4a | Find unknown angles in any triangles, quadrilaterals and regular polygons | 2 |
| | 6G4b | Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles | 2 |
| 6 | 6N6 | Solve number problems and practical problems that involve 6N2–6N5 | 1 |
| | 6N5 | Use negative numbers in context, and calculate intervals across zero | 1 |
| | 6G2b | Describe simple 3-D shapes | 2 |
| | 6G3b | Recognise and build simple 3-D shapes, including making nets | 2 |

| | | | |
|----|------|--|---|
| | 6G5 | Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius | 1 |
| | 6P2 | Draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes | 1 |
| | 6P3 | Describe positions on the full co-ordinate grid (all four quadrants) | 2 |
| 7 | 6F5a | Multiply simple pairs of proper fractions, writing the answer in its simplest form [e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] | 1 |
| | 6F5b | Divide proper fractions by whole numbers [e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$] | 1 |
| 8 | 6M6 | Convert between miles and kilometres | 1 |
| | 6M7a | Recognise that shapes with the same areas can have different perimeters and vice versa | 1 |
| | 6M7b | Calculate the area of parallelograms and triangles | 1 |
| | 6M9 | Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate | 1 |
| 9 | 6R2 | Solve problems involving the calculation of percentages [e.g. of measures such as 15% of 360] and the use of percentages for comparison | 2 |
| | 6S1 | Interpret and construct pie charts and line graphs and use these to solve problems | 3 |
| | 6S3 | Calculate and interpret the mean as an average | 2 |
| 10 | 6R3 | Solve problems involving similar shapes where the scale factor is known or can be found | 3 |
| | 6R4 | Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples | 1 |