Year 1

Number & place value | 25%

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number | 25% (6.25%)

- Count to 10 forwards and backwards (Own) | 33.33% (2.08%)
- Count to 20 forwards and backwards (Ch6) | 33.33% (2.08%)
- Count to 100 and across 100 from any given number (Ch15) | 33.33% (2.08%)

Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens | 25% (6.25%)

- Count a number of objects to 20 (Ch6) | 20% (1.25%)
- Read numbers to 40 (Ch10) | 20% (1.25%)
- Read numbers to 100 (Ch15) | 20% (1.25%)
- Write numbers to 100 (Ch15) | 20% (1.25%)
- Complete missing numbers in a sequence (Ch10) | 20% (1.25%)

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 | 25% (6.25%)

- Compare two numbers that have been created with practical equipment and explain how they are different (Ch15) | 33.33% (2.08%)
- Order numbers to 100 (Ch15) | 33.33% (2.08%)
- Position two numbers on a number line and reason as to where they have been positioned (Own) | 33.33% (2.08%)

Read and write numbers from 1 to 20 in numerals and words | 25% (6.25%)

- Read numbers from 1 – 20 in numerals (Ch6) | 25% (1.56%)
- Write numbers from 1 – 20 in numerals (Ch6) | 25% (1.56%)
- Read numbers from 1 – 20 in words (Ch6) | 25% (1.56%)
- Write numbers from 1 – 20 in words (Ch6) | 25% (1.56%)

Addition and Subtraction | 25%

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs | 25% (6.25%)

- Begin to use addition (+), subtraction (-) and equals (=) signs to record their work (Ch3 and Ch4) | 33.34% (2.08%)
- Read the mathematical statements they have recorded (Ongoing) | 33.33% (2.08%)
- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) (Ongoing) | 33.33% (2.08%)

Represent and use number bonds and related subtraction facts within 20 | 25% (6.25%)

- Using apparatus represent and use number bonds and related subtraction facts up to 5 (Ch3) | 11.11% (0.69%)
- Recall and use addition and subtraction facts for all numbers up to 5 (Ch3) | 11.11% (0.69%)
- Recall and use addition and subtraction facts for all numbers up to 10 fluently (Ch3) | 11.11% (0.69%)
- Recognise the effect of adding zero (Ch3) | 11.11% (0.69%)
- Using apparatus represent and use number bonds and related subtraction facts up to 20 (Ch7) | 11.11% (0.69%)
- Recall and use addition and subtraction facts for all numbers facts to 20 fluently (Ch7) | 11.11% (0.69%)
- Develop the difference between two numbers on a numberline (Ch7) | 11.11% (0.69%)
- Understand the inverse relationship between addition and subtraction (Ch7) | 11.11% (0.69%)
- Solve missing number calculations to 20 (Ch7) | 11.11% (0.69%)

Add and subtract one-digit and two-digit numbers to 20, including zero | 25% (6.25%)

- Add and subtract numbers mentally, using Reordering (Ch3,4,7) | 33.33% (2.08%)
- Add and subtract numbers mentally, using Bridging through 10 (Ch3,4,7) | 33.33% (2.08%)
- Use a numberline to support adding 2 digit and 1 digit numbers (Ch7) | 33.33% (2.08%)

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems, such as 7 = -9 | 25% (6.25%)

- Show that addition can be done in any order (commutative) (Ch3 and Ch7) | 20% (1.25%)
- Show that subtraction can't be done in any order (Ch7 and Ch 4) | 20% (1.25%)
- Understand and use a variety of mathematical language associated with addition and subtraction, e.g. put together, add , altogether, total, take away, distance between, more than and less than (Ch11) | 20% (1.25%)
- Solve missing number addition and subtraction problems involving single-digit numbers (Ch11) | 20% (1.25%)
- Solve simple 1 step problems with addition and subtraction (Ch11) | 20% (1.25%)

Multiplication and Division | 10%

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 | 100% (10%)

- Use concrete objects to double numbers to 10 (Ch12) | 8.33% (0.83%)
- Use concrete objects to half numbers to 20 (Own) | 8.33% (0.83%)
- Count in steps of 10 | 8.33% (0.83%)
- Count in steps of 2 | 8.33% (0.83%)
- Count in steps of 5 | 8.33% (0.83%)
- Find a total when counting in groups of 10 (Ch12) | 8.33% (0.83%)
- Find a total when counting in groups of 2 (Ch12) | 8.33% (0.83%)

- Find a total when counting in groups of 5 (Ch12) | 8.33% (0.83%)
- Solve word problems involving multiplication (Ch12) | 8.33% (0.83%)
- Use an array to represent a multiplication fact (Ch12) | 8.33% (0.83%)
- Share objects equally into groups of 2, 5 or 10 (Ch13) | 8.33% (0.83%)
- Solve word problems involving division (Ch12) | 8.33% (0.83%)

Fractions, decimals & % | 10%

Recognise, find and name a half as one of two equal parts of an object, shape or quantity | 50% (5%)

- Understand fraction as equal parts of a whole (Ch14) | 33.34% (1.67%)
- Understand that to half a shape or object you need two equal parts (Ch14) | 33.33% (1.67%)
- Understand one half as one of two equal parts of a whole (Ch14) | 33.33% (1.67%)

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | 50% (5%)

- Understand quarter of a shape or objects is four equal parts (Ch14) | 50% (2.5%)
- Understand one quarter as one of four equal parts of a whole (Ch14) | 50% (2.5%)

Measurement | 15%

Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] | 11.11% (1.67%)

- Can use non-standard measures to measure lengths and heights (Own) | 50% (0.83%)
- Can estimate and measure whether an object is longer or shorter than a class ruler (Own) | 50% (0.83%)

Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than] | 11.11% (1.67%)

- Can compare mass of objects by holding them and using non-standard units (Ch19) | 33.33% (0.56%)
- Can use balance scales to compare the mass of objects (Ch19) | 33.33% (0.56%)
- Can estimate and measure whether an object weighs more or less than a kilogram (Ch19) | 33.33% (0.56%)

Compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] | 11.11% (1.67%)

- Can use non-standard measures to measure capacity (Ch18) | 33.33% (0.56%)
- Can compare the capacity of different measuring vessels (Ch18) | 33.33% (0.56%)
- Can estimate and measure whether a container containers more or less than a litre jug (Own) | 33.33% (0.56%)

Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] | 11.11% (1.67%)

- Can estimate whether an activity lasts longer/less than a minute/hour (Own) | 50% (0.83%)
- Can use language of quicker, slower, earlier and later (Ongoing) | 50% (0.83%)

Measure and begin to record the following: lengths and heights, mass/weight, capacity and volume, time (hours, minutes, seconds) | 11.11% (1.67%)

- Can use standard units to measure and compare length and height (cm)(Ch9) | 25% (0.42%)
- Can use standard units to measure and compare mass/weight (kg) (Ch19) | 25% (0.42%)
- Can use standard units to measure and compare capacity and volume (l) (Ch18) | 25% (0.42%)
- Can decide which measuring tool could be used in a particular situation (Ch9,18,19) | 25% (0.42%)

Recognise and know the value of different denominations of coins and notes | 11.11% (1.67%)

- Can identify coins by sorting them (Ch17) | 14.29% (0.24%)
- Can recognise the value of each coin and that some coins have a greater value than others (Ch17) | 14.28% (0.24%)
- Can recognise the value of each note and that some notes have a greater value than others(Ch17) | 14.28% (0.24%)
- Can add up small amounts of money and say how much altogether (Own) | 14.29% (0.24%)
- Can pay for items of a small value e.g. 3p, 5p, 7p, 9p using coins (Own) | 14.28% (0.24%)
- Can give change using 1p coins (Own) | 14.29% (0.24%)
- Can answer questions such as: Michael had £5. He spent £3. How much did he have left? Rosie had a 10p coin. She spent 3p. How much change did she get? (Own) | 14.29% (0.24%)

Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] | 11.11% (1.67%)

Can use language before, after, next, first, in relation to time passing and sequencing of events in familiar stories or day-to-day routines (Ch16) | 100% (1.67%)

Recognise and use language relating to dates, including days of the week, weeks, months and years | 11.11% (1.67%)

- Can learn the order of the days of the week and learn that weekend days are Saturday and Sunday (Ongoing) | 50% (0.83%)
- Can name and order the months of the year (Ongoing) | 50% (0.83%)

Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times | 11.12% (1.67%)

- Can tell time to the hour (Ch16) | 20% (0.33%)

- Can draw hands on the clock for times to the hour (Ch16) | 20% (0.33%)
- Can tell time to half past the hour (Ch16) | 20% (0.33%)
- Can draw hands on the clock for times for half hour (Ch16) | 20% (0.33%)
- Can recognise times to the hour and half hour in day to day routines (Ch16) | 20% (0.33%)

Geometry: Properties of shape | 10%

Recognise and name common 2D shapes [for example, rectangles (including squares), circles and triangles] | 50% (5%)

- Recognise 2D shapes in a variety of orientations - rectangles (including squares), circles, triangles (Ch8) | 33.33% (1.67%)
- Describe 2D shapes according to their properties (sides and corners) (Ch8) | 33.33% (1.67%)
- Continue shape patterns (Ch8) | 33.33% (1.67%)

Recognise and name common 3D shapes [for example, cuboids (including cubes), pyramids and spheres] | 50% (5%)

Recognise 3D shapes in a variety of orientations - cylinder, triangular prism, cone, cube, cuboid, pyramids and spheres (Ch8) | 100% (5%)

Geometry: Position & Direction | 5%

Describe position, direction and movement, including whole, half, quarter and three-quarter turns | 100% (5%)

- Can distinguish between left and right (Ch20) | 25% (1.25%)
- Can use ordinal language, e.g. 1st, 4th (Ch20) | 25% (1.25%)
- Can use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside (Ch20) | 25% (1.25%)
- Can recognise whole, half, quarter and three quarter turns (Ch20) | 25% (1.25%)

Year 2

Number & place value | 20%

Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward | 16.66% (3.33%)

- Count in 3s from 0 (TT) | 25% (0.83%)
- Count forwards and backwards in 5s from 0 (TT) | 25% (0.83%)
- Count forwards and backwards in 2s from 0 (TT) | 25% (0.83%)
- Count forwards and backwards in 10s from any number (Ch1) | 25% (0.83%)

Recognise the place value of each digit in a two-digit number (tens, ones) | 16.66% (3.33%)

- Identify the number of tens and ones in a 2 digit number (Ch1) | 50% (1.67%)
- Identify the larger of two 2 digit numbers and explain reasoning (Ch1) | 50% (1.67%)

Identify, represent and estimate numbers using different representations, including the number line | 16.67% (3.33%)

- Create 2 digit numbers using concrete equipment and use to explain reasoning about the size of numbers (Ch1) | 50% (1.67%)
- Partition any 2 digit number into different combinations of tens and ones explaining their thinking using apparatus, pictorially and verbally. (Framework) | 50% (1.67%)

Compare and order numbers from 0 up to 100; use <, > and = signs | 16.67% (3.33%)

Position the <, > and = signs correctly between two 2 digit numbers | 100% (3.33%)

Read and write numbers to at least 100 in numerals and in words | 16.67% (3.33%)

Read numbers from 1 - 100 in numerals (Ch1) | 100% (3.33%)

Use place value and number facts to solve problems | 16.67% (3.33%)

- Use part whole diagram to solve problems involving partitioning. (Ch1) | 50% (1.67%)
- Place 2 digit numbers on an unmarked number line. (Own) | 50% (1.67%)

Addition and Subtraction | 20%

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 | 25% (5%)

- Relate number facts to 10 to adding and subtracting multiples of 10 within 100 (Own) | 33.33% (1.67%)
- Recall and use addition and subtraction facts to 20 fluently; derive and use related facts to 100 (Own) | 33.33% (1.67%)
- Solve missing box and missing symbol calculations, including number bonds (Own) | 33.34% (1.67%)

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, adding three one-digit numbers | 25% (5%)

- Add and subtract a 2-digit number and 1s (Ch2) | 20% (1%)
- Add and subtract a 2-digit number and 10s (Ch2) | 20% (1%)
- Add and subtract 2 simple, 2-digit numbers, which do not involve bridging a 10 (Ch2) | 20% (1%)
- Adding 3 single-digit numbers (Ch2) | 20% (1%)
- Add and subtract and 2 digit numbers using an efficient strategy explaining their method verbally, in pictures or using apparatus with bridging (Framework) (Ch2) | 20% (1%)

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems | 25% (5%)

- Recognise and use the inverse relationship between addition and subtraction (Own) | 50% (2.5%)
- Check calculations using the inverse operation (Own) | 50% (2.5%)

Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures and applying their increasing knowledge of mental and written methods | 25% (5%)

- Solve simple 2-step problems with addition and subtraction, applying increasing knowledge of practical, pictorial written methods (Ch9) | 33.33% (1.67%)
- Solve problems involving adding 2 digit numbers (Ch 9 and Ch2) | 33.33% (1.67%)
- Solve problems involving subtracting 2 digit numbers (Ch9 and Ch2) | 33.33% (1.67%)

Multiplication and Division | 15%

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers | 33.33% (5%)

- Use concrete objects to show understanding of multiplication (Ch3) | 20% (1%)
- Recall the 10x table in a random order (Ch3) | 20% (1%)
- Recall the 2x table in a random order (Ch3) | 20% (1%)
- Recall the 5x table in a random order (Ch3) | 20% (1%)
- Recognise odd and even numbers (Ch4) | 20% (1%)

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | 33.33% (5%)

- Use an array to record 2 multiplication sentences and to explain the commutative law, e.g. why 2 x 5 is the same as 5 x 2? (Ch3 and Ch4) | 33.34% (1.67%)
- Use an array to record the 2 division sentences that can be made from the image (Ch2 and Ch4) | 33.33% (1.67%)

- Use an array to record the two addition sentences that can be made (Ch3 and Ch4) | 33.33% (1.67%)

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | 33.33% (5%)

- Use materials, arrays, repeated addition, mental methods, and multiplication and division facts to solve sharing word problems in context (Ch4) | 50% (2.5%)
- Use materials, arrays, repeated addition, mental methods, and multiplication and division facts to solve grouping word problems in context (Ch4) | 50% (2.5%)

Fractions, decimals & % | 10%

Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity | 33.34% (3.33%)

Find fractions of quantities with resources (Ch13) | 100% (3.33%)

Write simple fractions for example, 1/2 of 6 = 3 | 33.33% (3.33%)

Know to calculate a fraction you divide the object/quantity by the denominator and multiply by the numerator (Ch13) | 100% (3.33%)

Recognise the equivalence of 2/4 and 1/2 | 33.33% (3.33%)

- Know 1/2 is equivalent to 2/4 Ch13) | 50% (1.67%)
- Find and write simple fractions of lengths and objects (Ch13) | 50% (1.67%)

Measurement | 15%

Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels | 16.67% (2.5%)

- Can make sensible estimations in relation to all areas of measure | 16.67% (0.42%)
- Can measure and record accurately in centimetres and metres using rulers and metre sticks (Ch5) | 16.67% (0.42%)
- Can measure and record accurately in grams and kilograms using measuring scales (Ch6) | 16.67% (0.42%)
- Can measure and record accurately in millilitres and litres using measuring vessels (Ch15) | 16.67% (0.42%)
- Can measure accurately in degrees Celsius (Ch7) | 16.67% (0.42%)
- Can decide the correct unit of measure, and tool, to use in a given situation, e.g. what unit of measure would we use to measure the mass of an apple? | 16.67% (0.42%)

Compare and order lengths, mass, volume/capacity and record the results using >, < and = | 16.67% (2.5%)

- Can compare and order different units of measure (Ch5,6,14,15) | 50% (1.25%)

- Can use ‹› and = to record comparisons (Ch5,6,14,15) | 50% (1.25%)

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value | 16.67% (2.5%)

- Can add together different coins and find the total (Ch10) | 50% (1.25%)
- Can find coins that make a particular amount, e.g. which coins could you use to make 20p? (Ch10) | 50% (1.25%)

Find different combinations of coins that equal the same amounts of money | 16.67% (2.5%)

Use different coins to make the same amount (Framework) | 100% (2.5%)

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | 16.67% (2.5%)

Can solve subtraction problems such as: Jess has saved 62p. She spends 15p. How much does she have left? (Ch10) | 100% (2.5%)

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 | 16.67% (2.5%)

- Can tell the time to quarter past the hour (Ch14) | 33.34% (0.83%)
- Can tell the time to quarter to the hour (Ch14) | 33.33% (0.83%)
- Can tell the time to the 5 minutes (Framework and Ch14) | 33.33% (0.83%)

Geometry: Properties of shape | 10%

Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line | 25% (2.5%)

- Identify the number of sides in a range of 2D shapes, including quadrilaterals and polygons Ch11) | 50% (1.25%)
- Identify vertical lines of symmetry in 2D shapes (Ch11) | 50% (1.25%)

Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces | 25% (2.5%)

- Recognise and name 3D shapes, including cuboids, prisms and cones (Ch12) | 50% (1.25%)
- Describe the properties of 3D shapes, including number of faces, edges and vertices (Ch12) | 50% (1.25%)

Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] | 25% (2.5%)

Identify 2D shapes on the surface of a 3D shape, including: A triangle on a pyramid, A square on a cube, A rectangle on a cuboid, A circle on a cylinder and cone, A triangle and rectangle on a triangular prism (Ch12) | 100% (2.5%)

Compare and sort common 2D and 3D shapes and everyday objects | 25% (2.5%)

- Sort and classify 2D and 3D shapes and everyday objects using a Venn diagram, according to their properties (Own and Ch11 and Ch12) | 50% (1.25%)
- Can sort and classify 2D and 3D shapes and everyday objects using a Carroll diagram (Own and Ch11 and Ch12) | 50% (1.25%)

Geometry: Position & Direction | 5%

Order and arrange combinations of mathematical objects in patterns and sequences | 50% (2.5%)

- Can describe patterns in sequences (Ch11 and Ch12) | 33.34% (0.83%)
- Can predict what comes next in a sequence (Ch11 and Ch12) | 33.33% (0.83%)
- Can continue a pattern (Ch11 and Ch12) | 33.33% (0.83%)

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) | 50% (2.5%)

- Can recognise whole and half turns (Own Beebots) | 33.34% (0.83%)
- Can recognise quarter and three quarter turns (Own Beebots) | 33.33% (0.83%)
- Can give instructions for a friend/robot using a right angled turns (Own Beebots) | 33.33% (0.83%)

Statistics | 5%

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables | 33.33% (1.67%)

- Record data in everyday situations, e.g. dinner or packed lunch? (Ch8) | 50% (0.83%)
- Present data in different ways using a scale of 2, 5 or 10 (Ch8) | 50% (0.83%)

Answer retrieval questions from the charts and graphs that they are working with | 33.33% (1.67%)

Answer retrieval questions from the charts and graphs that they are working with (Ch8) | 100% (1.67%)

Ask and answer questions about totalling and comparing categorical data | 33.34% (1.67%)

- Find the total of two categories on a pictogram, tally, block diagram and simple table (Ch8) | 50% (0.83%)
- Find the difference between two categories on a pictogram, tally, block diagram and simple table (Ch8) | 50% (0.83%)

Year 3

Number & place value | 20%

Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number | 16.67% (3.33%)

- Count in multiples of 4 and 8 and use doubling to explain the relationship between them (Ch3 and TT) | 25% (0.83%)
- Count in multiples of 50 and 100 and use doubling to explain the relationship between them (Ch1) | 25% (0.83%)
- Find 10 more or less than a given number and explain which digit changes and which stays the same (Ch1) | 25% (0.83%)
- Find 100 more or less than a given number and explain which digit changes and which stays the same (Ch1) | 25% (0.83%)

Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) | 16.67% (3.33%)

- Identify the number of hundreds, tens and ones in a 3 digit number (Ch1) | 50% (1.67%)
- Identify the larger of two 3 digit numbers and explain reasoning (Ch1) | 50% (1.67%)
- Compare and order numbers up to 1000 | 16.67% (3.33%)

Position 3 digit numbers on a number line and explain reasoning about where they are positioned (Own) | 100% (3.33%)

Identify, represent and estimate numbers using different representations | 16.67% (3.33%)

Use representations such as dienes, place value counters and money to represent 3 digit numbers(Ch1) | 100% (3.33%)

Read and write numbers up to 1000 in numerals | 16.66% (3.33%)

Use understanding of numbers 1 – 100 to read and write numbers to 1000 (Ch1) | 100% (3.33%)

Solve number problems and practical problems involving these ideas | 16.66% (3.33%)

Solve place value problems (Ch1) | 100% (3.33%)

Addition and Subtraction | 20%

Add and subtract numbers mentally, including a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds | 25% (5%)

- Add and subtract numbers using place value and partitioning (Ch2) | 50% (2.5%)
- Count on to find the difference between two numbers (On going) | 50% (2.5%)

Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | 25% (5%)

- Calculate using a formal written method for TU + TU, no bridging and with bridging (Ch2) | 12.5% (0.63%)
- Calculate using a formal written method for HTU + TU, no bridging and with bridging (Ch2) | 12.5% (0.63%)
- Calculate using a formal written method for HTU + HTU, no bridging (Ch2) | 12.5% (0.63%)
- Calculate using a formal written method for HTU + HTU, with bridging (Ch2) | 12.5% (0.63%)
- Calculate using a formal written method for TU - TU, no bridging and with bridging (Ch2) | 12.5% (0.63%)
- Calculate using a formal written method for HTU - TU, no bridging and with bridging (Ch2) | 12.5% (0.63%)
- Calculate using a formal written method for HTU - HTU, no bridging (Ch2) | 12.5% (0.63%)
- Calculate using a formal written method for HTU - HTU, with bridging (Ch2) | 12.5% (0.63%)

Estimate the answer to a calculation and use inverse operations to check answers | 25% (5%)

- Round numbers to estimate answers to a problem (Own) | 50% (2.5%)
- Understand how to use the inverse to check answers to a calculation (Own) | 50% (2.5%)

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction | 25% (5%)

- Use a bar model to solve a problem (Ch2) | 25% (1.25%)
- Find missing box calculations (Ch2) | 25% (1.25%)
- Solve addition word problems (Ch2) | 25% (1.25%)
- Solve subtraction word problems (Ch2) | 25% (1.25%)

Multiplication and Division | 20%

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables | 33.34% (6.67%)

- Recall the 3x table (Ch3 and TT) | 16.67% (1.11%)
- Recall the 4x table (Ch3 and TT) | 16.67% (1.11%)
- Recall the 8x table (Ch3 and TT) | 16.67% (1.11%)
- Double numbers to 100 (Own) | 16.67% (1.11%)
- Halve numbers to 100 (Own) | 16.67% (1.11%)
- Derive related division facts (Ch3) | 16.67% (1.11%)

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 | 33.33% (6.67%)

- Use multiplication facts to solve TU x U using partitioning (Ch4) | 33.33% (2.22%)

- Use multiplication facts to solve TU x U using a formal written method (Ch4) | 33.33% (2.22%)
- Begin to use a formal written method to divide TU by U (Ch4 and own) | 33.33% (2.22%)

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 | 33.33% (6.67%)

- Solve missing box calculations relating to recall of multiplication and division facts (Ch3 and Ch4) | 33.33% (2.22%)
- Solve correspondence problems such as 3 tops, 4 football shorts, how many different outfits can be made? (Ch3) | 33.33% (2.22%)
- Solve division problems, e.g. 12 sweets between 3 children or 4 cakes between 8 children (Ch4) | 33.33% (2.22%)

Fractions, decimals & % | 20%

Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 | 16.67% (3.33%)

- Understand tenths are dividing an object or a number into ten equal parts (Ch11) | 33.33% (1.11%)
- Find and place tenths on a number line (Ch11) | 33.33% (1.11%)
- Compare and order numbers to 1dp (Own) | 33.33% (1.11%)

Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators | 16.67% (3.33%)

- Understand the numerator and denominator in a proper fraction (Ch11) | 25% (0.83%)
- Can calculate unit fractions by dividing (Ch11) | 25% (0.83%)
- Can compare unit fractions on a number line (Ch11) | 25% (0.83%)
- Find a fraction of a number (Ch11) | 25% (0.83%)

Recognise and show, using diagrams, equivalent fractions with small denominators | 16.67% (3.33%)

- Recognise that one whole is equivalent to two halves, three thirds, four quarters (Ch11) | 25% (0.83%)
- Can work out equivalent fractions using diagrams and fraction walls (Ch11) | 25% (0.83%)
- Can explore patterns within equivalent fractions (Ch11) | 25% (0.83%)
- Can explain the link between multiplication and equivalent fractions (Ch11) | 25% (0.83%)

Add and subtract fractions with the same denominator within one whole | 16.67% (3.33%)

- Identify fractions that will total 1 (Ch11) | 50% (1.67%)
- Can add fractions with the same denominator up to 1 (Ch11) | 50% (1.67%)

Compare and order unit fractions, and fractions with the same denominators | 16.66% (3.33%)

Compare and order fractions with the same denominator (Ch11) | 100% (3.33%)

Solve fraction word problems | 16.66% (3.33%)

Solve fraction word problems (Ch11) | 100% (3.33%)

Measurement | 10%

Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) | 16.67% (1.67%)

- Can measure accurately in m/cm/mm (Ch5) | 10% (0.17%)
- Can convert between mm/cm/m (Ch5) | 10% (0.17%)
- Can measure accurately in kg/g (Ch6) | 10% (0.17%)
- Can convert between kg/g (Ch6) | 10% (0.17%)
- Can measure accurately in l/ml (Ch7) | 10% (0.17%)
- Can convert between l/ml (Ch7) | 10% (0.17%)
- Can compare measures using the appropriate scale (Ch5,6,7) | 10% (0.17%)
- Solve problems involving measures (Ch5,6,7) | 10% (0.17%)
- Can compare and use mixed units, e.g. 1kg and 200g (Ch5,6,7) | 10% (0.17%)
- Solve problems linked to scaling measures (Ch5,6,7) | 10% (0.17%)

Measure the perimeter of simple 2D shapes | 16.67% (1.67%)

Can measure the sides of regular polygons in centimetres and find their perimeters in centimetres (Ch14) | 100% (1.67%)

Add and subtract amounts of money to give change, using both £ and p in practical contexts | 16.67% (1.67%)

- Understand tenths in relation to money (Ch8) | 25% (0.42%)
- Can add and subtract amounts of money (Ch8) | 25% (0.42%)
- Can add and subtract mixed units (Ch8) | 25% (0.42%)
- Can give change (Ch8) | 25% (0.42%)

Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks | 16.67% (1.67%)

- Can read times in analogue format to the minute (Ch9) | 50% (0.83%)
- Can read times in digital format to the minute (Ch9) | 50% (0.83%)

Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight | 16.67% (1.67%)

Can solve problems involving time (Ch9) | 100% (1.67%)

Know the number of seconds in a minute and the number of days in each month, year and leap year | 16.67% (1.67%)

- Can say how many seconds there are in a minute (Ch9) | 33.34% (0.56%)
- Can say how many days there are in a month (Ch9) | 33.33% (0.56%)
- Can say how many days there are in a year (including leap years) (Ch9) | 33.33% (0.56%)

Geometry: Properties of shape | 5%

Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them | 25% (1.25%)

- Describe the properties of 2D shapes, including semi-circles, using accurate language about lengths of lines and numbers of vertices (Ch13) | 16.67% (0.21%)
- Recognise shapes with equal side lengths (Ch13) | 16.67% (0.21%)
- Recognise lines of symmetry in 2D shapes (Ch13) | 16.67% (0.21%)
- Use Venn and Carroll diagrams to classify 2D shapes (Own) | 16.67% (0.21%)
- Describe the properties of 3D shapes, including hemispheres and prisms, using language such as base, face, vertex and edge (Ch13) | 16.67% (0.21%)
- Recognise and name 3D shapes viewed from different angles (Ch13) | 16.67% (0.21%)

Recognise angles as a property of shape or a description of a turn | 25% (1.25%)

- Can recognise that angles are the amount of turn between two lines (Ch12) | 50% (0.63%)
- Describe properties of shapes in terms of the angles formed at vertices | 50% (0.63%)

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 | 25% (1.25%)

- Identify right angles as 90° (Ch12) | 20% (0.25%)
- Recognise that two right angles make a half turn or 180° (Ch12) | 20% (0.25%)
- Recognise that three right angles make a three quarter turn or 270° (Ch12) | 20% (0.25%)
- Recognise that four right angles make a whole turn or 360° (Ch12) | 20% (0.25%)
- Use the terms acute and obtuse to describe angles less or greater than a right angle (Ch12) | 20% (0.25%)

Identify horizontal and vertical lines and pairs of perpendicular and parallel lines | 25% (1.25%)

- Identify horizontal and vertical lines (Ch12) | 33.34% (0.42%)
- Identify pairs of parallel lines within shapes and around them (Ch12) | 33.33% (0.42%)
- Identify pairs of perpendicular lines within shapes and around them (Ch12) | 33.33% (0.42%)

Statistics | 5%

Interpret and present data using bar charts, pictograms and tables | 50% (2.5%)

- Interpret data from a pictogram when one symbol represents more than one unit (Ch10) | 20% (0.5%)
- Interpret data in graphs and understand varying scales of multiples of 2, 5 and 10 when reading values presented in bar charts (Ch10) | 20% (0.5%)
- Create a tally chart and understand that grouping in 5s helps with the accuracy and speed of counting the totals (Ch10) | 20% (0.5%)
- Transfer data from a tally chart to a table (Ch10) | 20% (0.5%)
- Create a bar chart to represent data (Ch10) | 20% (0.5%)

Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables | 50% (2.5%)

- Answer questions from a bar chart that involve comparison, sum and difference (Ch10) | 33.33% (0.83%)
- Answer questions from a pictogram that involve comparison, sum and difference (Ch10) | 33.33% (0.83%)
- Answer questions from a table that involve comparison, sum and difference (Ch10) | 33.34% (0.83%)

Year 4

Number & place value | 15%

Count in multiples of 6, 7, 9, 25 and 1000 | 12.5% (1.88%)

- Count in multiples of 6, 7 and 9 (Ch1) | 50% (0.94%)
- Count in multiples of 25 and 100 and explain the link between the two amounts (Ch1) | 50% (0.94%)

Find 1000 more or less than a given number | 12.5% (1.88%)

- Find 1000 more than a given number and explain which digit changes (Ch1) | 50% (0.94%)
- Find 1000 less than a given number and explain which digit changes (Ch1) | 50% (0.94%)

Count backwards through zero to include negative numbers | 12.5% (1.88%)

Count backwards in a range of multiples to include negative numbers and understand the value of the digits (Own) | 100% (1.88%)

Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) | 12.5% (1.88%)

Identify the larger of two 4 digit numbers and explain reasoning (Ch1) | 100% (1.88%)

Order and compare numbers beyond 1000 | 12.5% (1.88%)

- Identify the number of thousands, hundreds, tens and ones in a 4 digit number (Ch1) | 33.33% (0.63%)
- Order 4 digit numbers (Ch1) | 33.33% (0.63%)
- Compare 4 digit numbers (Ch1) | 33.33% (0.63%)

Round any number to the nearest 10, 100 or 1000 | 12.5% (1.88%)

- Round numbers to the nearest 10 (Ch1) | 25% (0.47%)
- Round numbers to the nearest 100 (Ch1) | 25% (0.47%)
- Round numbers to the nearest 1000 (Ch1) | 25% (0.47%)
- Explain the rules of rounding (Ch1) | 25% (0.47%)

Solve number and practical problems that involve all of the above and with increasingly large positive numbers | 12.5% (1.88%)

Solve problems involving place value, including word problems and problems linked to money and measure (Ch1) | 100% (1.88%)

Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value | 12.5% (1.88%)

Read Roman numerals to 100 (Ch14) | 100% (1.88%)

Addition and Subtraction | 20%

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate | 40% (8%)

- Can Calculate THTU + THTU (with bridging) (Ch2) | 25% (2%)
- Can Calculate THTU + THTU (without bridging) (Ch2) | 25% (2%)
- Can calculate THTU - ThHTU (with bridging) (Ch2) | 25% (2%)
- Can Calculate THTU - ThHTU (without bridging) (Ch2) | 25% (2%)

Estimate and use inverse operations to check answers to a calculation | 20% (4%)

- Can estimate the answer of an addition or subtraction calculations up to 4 digits (Ch2) | 50% (2%)
- Can use addition and subtraction to calculate the inverse (Ch2) | 50% (2%)

Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why | 40% (8%)

- Solve addition word problems (Ch2) | 50% (4%)
- Solve subtraction word problems (Ch2) | 50% (4%)

Multiplication and Division | 20%

Recall multiplication and division facts for multiplication tables up to 12 × 12 | 16.67% (3.33%)

- Recall the 3x 4x 8x table from year 3 (TT) | 14.29% (0.48%)
- Recall the 6x table (TT) | 14.29% (0.48%)
- Recall the 7x table (TT) | 14.29% (0.48%)
- Recall the 9x table (TT) | 14.29% (0.48%)
- Recall the 11x table (TT) | 14.29% (0.48%)
- Recall the 12x table (TT) | 14.29% (0.48%)
- Derive related division facts and understand that division cannot be done in any order (Ch3) | 14.29% (0.48%)

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 | 16.67% (3.33%)

- Understand how a multiplication fact can be used to multiply by a multiple of 10 (Ch3) | 20% (0.67%)
- Understand how a multiplication fact can be used to multiply by a multiple of 100 (Ch3) | 20% (0.67%)
- Understand how to multiply 3 one digit numbers together (Ch3) | 20% (0.67%)
- Understand the effect of multiplying by 1 and 0 (Ch3) | 20% (0.67%)
- Understand the effect of dividing by 1 (Ch3) | 20% (0.67%)

Recognise and use factor pairs and commutativity in mental calculations | 16.67% (3.33%)

Identify factors of a 2 digit number (Own) | 100% (3.33%)

Multiply two-digit and three-digit numbers by a one-digit number using formal written layout | 16.67% (3.33%)

- Use a formal written method to multiply TU by U (Ch4) | 50% (1.67%)
- Use a formal written method to multiply HTU by U (Ch4) | 50% (1.67%)

Divide 2 and 3 digit numbers by a one digit | 16.67% (3.33%)

- Divide a two digit number be a one digit using a formal written method (Ch4) | 50% (1.67%)
- Divide a three digit number by a one digit using a formal written method (Ch4) | 50% (1.67%)

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 | 16.67% (3.33%)

- Solve word problems involving multiplication (Ch3 and4) | 25% (0.83%)
- Solve word problems involving division (Ch3 and4) | 25% (0.83%)
- Solve scaling problems involving measures (Ch3 and4) | 25% (0.83%)
- Solve correspondence problems, e.g. there are 3 starters, mains and desserts on a menu. How many possible meals could you have? (Ch3 and4) | 25% (0.83%)

Fractions, decimals & % | 20%

Recognise and show, using diagrams, families of common equivalent fractions | 10% (2%)

- Can use common multiples to generate equivalent fractions (Ch6) | 50% (1%)
- Can simplify fractions using common factors (Ch6) | 50% (1%)

Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten | 10% (2%)

- Understand tenths are dividing an object or a number into 10 equal parts (Ch8) | 20% (0.4%)
- Understand hundredths are dividing an object or a number into 100 equal parts (Ch8) | 20% (0.4%)
- Find and place hundredths on a number line (Ch8) | 20% (0.4%)
- Use hundredths in money and measure (Ch8) | 20% (0.4%)
- Compare and order numbers to 2dp (Ch8) | 20% (0.4%)

Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number | 15% (3%)

- Can use unit fractions to solve a problem (Ch6) | 50% (1.5%)
- Can use non-unit fractions to solve a problem (Ch6) | 50% (1.5%)

Add and subtract fractions with the same denominator | 10% (2%)

- Add multiples of common fractions such as a 1/2 and 1/4 (Ch6) | 33.34% (0.67%)
- Add and subtract fractions with a common denominator (Ch6) | 33.33% (0.67%)
- Use equivalent fractions to add and subtract fractions of the same denominator | 33.33% (0.67%)

Recognise and write decimal equivalents of any number of tenths or hundredths | 10% (2%)

- Identify and calculate 1/10 as a decimal (Ch8) | 50% (1%)
- Identify and calculate 1/100 as a decimal (Ch8) | 50% (1%)

Recognise and write decimal equivalents to 1/4, 1/2 and 3/4 | 5% (1%)

- Can recall decimal equivalent to 1/2 (Ch8) | 33.34% (0.33%)
- Can recall decimal equivalent to 1/4(Ch8) | 33.33% (0.33%)
- Can recall decimal equivalent to 3/4(Ch8) | 33.33% (0.33%)

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 | 10% (2%)

- Can explain the effect of dividing a one-digit number by 10 (Ch8) | 25% (0.5%)
- Can explain the effect of dividing a two-digit number by 10 (Ch8) | 25% (0.5%)
- Can explain the effect of dividing a one-digit number by 100 (Ch8) | 25% (0.5%)
- Can explain the effect of dividing a two-digit number by 100 (Ch8) | 25% (0.5%)

Round decimals with one decimal place to the nearest whole number | 5% (1%)

Can identify the nearest whole number to a one decimal place number (Ch8) | 100% (1%)

Compare numbers with the same number of decimal places up to two decimal places | 10% (2%)

- Can compare and order 1 dp numbers (Ch8) | 50% (1%)
- Can compare 2dp numbers (Ch8) | 50% (1%)

Solve simple measure and money problems involving fractions and decimals to two decimal places | 15% (3%)

- Knows how many 10ps are in a £1 (Ch8) | 20% (0.6%)
- Knows how many 1ps are in a £1 (Ch8) | 20% (0.6%)
- Knows how many cm are in a metre (Ch8) | 20% (0.6%)
- Can solve problems involving money to 2dp(Ch8) | 20% (0.6%)
- Can solve problems involving length to 2dp (Ch8) | 20% (0.6%)

Measurement | 10%

Convert between different units of measure [for example, kilometre to metre; hour to minute] | 16.67% (1.67%)

- Can use multiplication and division to aid conversion (Ch10) | 16.67% (0.28%)
- Can convert km into m and vice versa (Ch10) | 16.67% (0.28%)
- Can convert an hour into minutes and vice versa (Ch7) | 16.67% (0.28%)
- Can convert l into ml and vice versa (Ch10) | 16.67% (0.28%)
- Can convert g into kg and vice versa (Ch10) | 16.67% (0.28%)
- Can suggest the most appropriate unit of measure (Ch10) | 16.67% (0.28%)

Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres | 16.67% (1.67%)

- Can measure lines of a rectangle to calculate the perimeter (Own) | 25% (0.42%)
- Can generalise about the perimeter of a rectangle using words and symbols (Own) | 25% (0.42%)
- Can use the formulae 2(L + W) to calculate perimeter (Own) | 25% (0.42%)
- Can work out the perimeter of irregular shapes (Own) | 25% (0.42%)

Find the area of rectilinear shapes by counting squares | 16.67% (1.67%)

- Can relate area to arrays and multiplication (Ch11) | 50% (0.83%)
- Can find the area of a rectangle by counting squares (Ch11) | 50% (0.83%)

Compare and calculate measures, including solving problems | 16.67% (1.67%)

- Compare different measures (Ch10) | 50% (0.83%)
- Solve problems involving measures (Ch10) | 50% (0.83%)

Read, write and convert time between analogue and digital 12 and 24 hour clocks | 16.67% (1.67%)

- Can read and understand 24 hour time (Ch7) | 33.34% (0.56%)
- Can relate 24 hour notation to am and pm (Ch7) | 33.33% (0.56%)
- Can covert 12 hour into 24 hour and vice versa (Ch7) | 33.33% (0.56%)

Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days | 16.67% (1.67%)

Can solve problems involving time conversions (Ch7) | 100% (1.67%)

Geometry: Properties of shape | 5%

Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes | 25% (1.25%)

- Know that and recognise that an equilateral triangle has three equal sides and three equal angles (Ch12) | 9.09% (0.11%)
- Know that and recognise that isosceles triangles have two equal sides and two equal angles (Ch12) | 9.09% (0.11%)

- Know that and recognise that right angled triangles have one right angle (Ch12) | 9.09% (0.11%)
- Know that and recognise that scalene triangles have no equal sides and no equal angles (Ch12) | 9.09% (0.11%)
- Know that and recognise that squares have four equal sides and four right angles (Ch12) | 9.09% (0.11%)
- Know that and recognise that rectangles have two pairs of equal and parallel sides and four right angles (Ch12) | 9.09% (0.11%)
- Know that and recognise that parallelograms have two pairs of equal and parallel sides (Ch12) | 9.09% (0.11%)
- Know that and recognise that rhombuses have four equal sides, two pairs of parallel sides (Ch12) | 9.09% (0.11%)
- Know that and recognise that trapeziums have: - one pair of parallel sides (Ch12) | 9.09% (0.11%)
- Know that and recognise that kites have two pairs of equal sides which are parallel, two equal angles (Ch12) | 9.09% (0.11%)
- To know the names of other polygons and their associated numbers of sides (Ch12) | 9.09% (0.11%)

Identify acute and obtuse angles and compare and order angles up to two right angles by size | 25% (1.25%)

- Identify acute angles on their own and within shapes (Ch12) | 33.34% (0.42%)
- Identify obtuse angles on their own and within shapes (Ch12) | 33.33% (0.42%)
- Compare two or more angles up to 180° (Ch12) | 33.33% (0.42%)

Identify lines of symmetry in 2D shapes presented in different orientations | 25% (1.25%)

- Know that and recognise that a square has four lines of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that a rectangle has two lines of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that a rhombus has two lines of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that a parallelogram has no lines of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that a trapezium may or may not have a line of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that a kite has one line of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that an equilateral triangle has three lines of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that an isosceles triangle has one line of symmetry (Ch12) | 11.11% (0.14%)
- Know that and recognise that a regular polygon has the same of lines of symmetry as it has sides (Ch12) | 11.11% (0.14%)

Complete a simple symmetric figure with respect to a specific line of symmetry | 25% (1.25%)

- Complete a pattern drawn on a square grid with one line of symmetry drawn parallel to the gridlines (Ch12) | 33.34% (0.42%)
- Complete a pattern drawn on a square grid with one line of symmetry drawn at an angle to the gridlines (Ch12) | 33.33% (0.42%)
- Complete a pattern drawn on a square grid with two lines of symmetry | 33.33% (0.42%)

Geometry: Position & Direction | 5%

Describe positions on a 2D grid as coordinates in the first quadrant | 33.34% (1.67%)

- Can distinguish between the x and y axis (Ch13) | 50% (0.83%)
- Can describe the position of a shape on an axis (Ch13) | 50% (0.83%)

Describe movements between positions as translations of a given unit to the left/right and up/down | 33.33% (1.67%)

- Can describe position of a vertex of a 2D shape in the first quadrant using a pair of coordinates (Ch13) | 50% (0.83%)
- Can translate a shape using left/right and up/down (Ch13) | 50% (0.83%)

Plot specified points and draw sides to complete a given polygon | 33.33% (1.67%)

Can use properties of shape to complete the vertices of a simple shape (plotting points) (Ch13) | 100% (1.67%)

Statistics | 5%

Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs | 50% (2.5%)

- Use an appropriate scale when representing data (Ch5) | 50% (1.25%)
- Answer questions from a range of different graphs, e.g. in which months was the temperature below 10°C? (Ch5) | 50% (1.25%)

Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs | 50% (2.5%)

- Answer questions from a bar chart that involve comparison, sum and difference (Ch5) | 25% (0.63%)
- Answer questions from a pictogram that involve comparison, sum and difference (Ch5) | 25% (0.63%)
- Answer questions from a table that involve comparison, sum and difference (Ch5) | 25% (0.63%)
- Answer questions from a line graph that involve comparison, sum and difference (Ch5) | 25% (0.63%)
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Year 5

Number & place value | 20%

Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit | 20% (4%)

- Explain the place value in numbers up to 1,000,000 | 33.34% (1.33%)
- Order a set of numbers to 1,000,000 | 33.33% (1.33%)
- Compare numbers to 1,000,000 | 33.33% (1.33%)

Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 | 20% (4%)

- Count forwards and backwards in 10s and 100s and explain how to find numbers 10 and 100 bigger or smaller than any number to 1,000,000 | 50% (2%)
- Count forwards and backwards in 1000s and 10,000s and explain how to find numbers 1000 and 10,000 bigger or smaller than any number to 1,000,000 | 50% (2%)

Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero | 20% (4%)

- Understand how to bridge through zero when counting forwards and backwards with positive and negative numbers | 50% (2%)
- Solve problems linked to temperature involving negative numbers | 50% (2%)

Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000 | 20% (4%)

- Understand the rules for rounding numbers and round any number up to 1,000,000 to the nearest 10 or 100 | 50% (2%)
- Understand the rules for rounding numbers and round any number up to 1,000,000 to the nearest , 1000, 10,000 and 100,000 | 50% (2%)

Read Roman numerals to 1000 (M) and recognise years written in Roman numerals | 20% (4%)

- Use Roman numerals to 100 to begin to derive Roman numerals to 1000 | 50% (2%)
- Recognise years written in Roman Numerals | 50% (2%)

Addition and Subtraction | 20%

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) | 25% (5%)

- Can solve THTU + THTU (bridging 10 and 100) | 33.33% (1.67%)
- Can solve THTU - THTU (bridging 10 and 100) | 33.33% (1.67%)
- Can use a formal written method to add money and measure using decimal notation to tenths and hundredths | 33.33% (1.67%)

Add and subtract numbers mentally with increasingly large numbers | 25% (5%)

- Can add and subtract increasing large numbers using a variety of strategies | 50% (2.5%)
- Doubling, Partitioning, Reordering, Bridging through a multiple of 10 | 50% (2.5%)

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy | 25% (5%)

Can estimate the answer up to 4 digits by rounding | 100% (5%)

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why | 25% (5%)

- Can use addition and/or subtraction strategies to solve a one step problem | 33.33% (1.67%)
- Can use addition and/or subtraction strategies to solve a multi-step problem | 33.33% (1.67%)
- Solve open-ended investigations | 33.33% (1.67%)

Multiplication and Division | 20%

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers | 5% (1%)

- Identify common factors in two 2 digit numbers | 33.33% (0.33%)
- Identify multiples of a number | 33.33% (0.33%)
- Systematically find all factor pairs of a 2 digit number | 33.33% (0.33%)

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers | 5% (1%)

- Understand the definition of prime number | 33.34% (0.33%)
- Break a number down into prime factors | 33.33% (0.33%)
- Understand the definition of a composite number | 33.33% (0.33%)

Establish whether a number up to 100 is prime and recall prime numbers up to 19 | 5% (1%)

- Identify prime numbers to 100 | 50% (0.5%)
- Recall prime numbers to 19 | 50% (0.5%)

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 | 15% (3%)

- Use a formal written method to multiply ThHTU by U | 25% (0.75%)
- Use a formal written method to multiply TU by TU | 25% (0.75%)
- Use a formal written method to multiply HTU by TU | 25% (0.75%)
- Use a formal written method to multiply ThHTU by TU | 25% (0.75%)

Multiply and divide numbers mentally, drawing upon known facts | 10% (2%)

- Quickly recall multiplication and division facts to 12 x 12 | 33.33% (0.67%)
- Multiply multiples of 10 by multiples of 10 | 33.33% (0.67%)
- Multiply multiples of 10 by multiples of 100 | 33.33% (0.67%)

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 | 10% (2%)

- Use a formal written method to divide TU by U | 25% (0.5%)
- Use a formal written method to divide HTU by U | 25% (0.5%)
- Use a formal written method to divide ThHTU by U | 25% (0.5%)
- Understand the meaning of a remainder in a context and interpret appropriately | 25% (0.5%)

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 | 10% (2%)

- Understand the effect of multiplying by 10, 100 and 1000 | 50% (1%)
- Understand the effect of dividing by 10, 100 and 1000 | 50% (1%)

Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) | 10% (2%)

- Understand how to square a number and the notation for squared | 25% (0.5%)
- Recognise square numbers | 25% (0.5%)
- Understand how to cube a number and the notation for cubed | 25% (0.5%)
- Recognise cube numbers | 25% (0.5%)

Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes | 10% (2%)

- Solve problems that link children's understanding of prime numbers, composite numbers, factors and multiples, e.g. complete a partial multiplication pyramid using knowledge of factors and multiples | 50% (1%)
- Solve multiplication and division problems linked to measurement using children's knowledge of squared and cubed numbers | 50% (1%)

Solve problems involving addition, subtraction, multiplication, division and a combination of these, including understanding the meaning of the equals sign | 10% (2%)

- Solve multiplication word problems | 33.33% (0.67%)
- Solve division word problems | 33.33% (0.67%)
- Recognise the equals sign as a balancing symbol e.g. 3 x 8 = 5 + ? | 33.34% (0.67%)

Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple ratio | 10% (2%)

- Solve problems that involve scaling | 50% (1%)
- Solve simple ratio problems | 50% (1%)

Fractions, decimals & % | 20%

Compare and order fractions whose denominators are all multiples of the same number | 10% (2%)

- Can convert fractions using multiples to have the same denominator | 50% (1%)
- Compare and order mixed and improper fractions | 50% (1%)

Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths | 10% (2%)

Identify, name and write equivalent fractions | 100% (2%)

Recognise mixed numbers and improper fractions and convert from one form to the other. Write mathematical statements > 1 as a mixed number | 10% (2%)

- Understands that when the numerator is more than the denominator it is more than one whole | 50% (1%)
- Understands fractions can be represented as a mixed number and an improper fraction | 50% (1%)

Add and subtract fractions with the same denominator and denominators that are multiples of the same number | 10% (2%)

- Can add and subtract fractions with the same denominator | 33.33% (0.67%)
- Can add and subtract fractions with denominators that are multiples of the same number | 33.33% (0.67%)
- Convert answers using mixed and improper fractions | 33.33% (0.67%)

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams | 10% (2%)

Can multiply together fractions with common denominators | 100% (2%)

Read and write decimal numbers as fractions | 10% (2%)

- Can convert decimals to fractions | 50% (1%)
- Can explain the value of each part of a decimal and explain the fraction equivalence | 50% (1%)

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents | 5% (1%)

- Identify and calculate 1/1000 as a decimal | 33.34% (0.33%)
- Can identify the pattern when finding other thousandths | 33.33% (0.33%)
- Compare thousandths to tenths and hundredths | 33.33% (0.33%)

Round decimals with two decimal places to the nearest whole number and to one decimal place | 5% (1%)

- Understand the rules of rounding up and down | 33.33% (0.33%)
- Apply the rules of rounding to a whole number | 33.33% (0.33%)
- Apply the rules of rounding to 1dp | 33.33% (0.33%)

Read, write, order and compare numbers with up to three decimal places | 5% (1%)

Order numbers to 3dp | 100% (1%)

Solve problems involving numbers up to three decimal places | 5% (1%)

Solve problems with numbers involving up to three decimal places | 100% (1%)

Recognise the percent symbol (%) and understand that per cent relates to 'number of parts per hundred'. Write percentages as a fraction with denominator 100 and as a decimal | 10% (2%)

- Can write the decimal equivalent to 1% | 25% (0.5%)
- Understand percentage as a number out of 100 | 25% (0.5%)
- Can write percentages as a fraction with denominator 100 | 25% (0.5%)
- Can use 1% to calculate 10%, 5%, 50% and 100% | 25% (0.5%)

Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5 and 4/5 and those fractions with a Denominator of a multiple of 10 or 25 | 10% (2%)

- Has a good recall of the percentage, fraction and decimal equivalence of 1/2, 1/4, 1/5, 2/5 and 4/5 | 50% (1%)
- Has a good recall of the percentage and decimal equivalence of fractions with a denominator of a multiple of 10 or 25 | 50% (1%)

Measurement | 5%

Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) | 20% (1%)

Can use their knowledge of place value and multiplication and division by 10, 100 and 1000 to convert between standard units | 100% (1%)

Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres | 20% (1%)

- Calculate the perimeter of composite rectangular shapes | 33.33% (0.33%)
- Can find missing lengths of composite shapes to calculate perimeter | 33.33% (0.33%)
- Can find missing lengths of a shape if given a perimeter | 33.33% (0.33%)

Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes | 20% (1%)

- Can use the formula, L x W to calculate area | 25% (0.25%)
- Understands why the answer is the unit squared | 25% (0.25%)

- Can find shapes that have a set area | 25% (0.25%)
- Can calculate area from scaled drawings | 25% (0.25%)

Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] | 20% (1%)

- Can find volumes of regular and irregular 3D shapes using cubes | 33.34% (0.33%)
- Can identify shapes/containers with a similar volume | 33.33% (0.33%)
- Can record volume using cm3 | 33.33% (0.33%)

Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling | 20% (1%)

- Can solve problems involving a variety of measures | 50% (0.5%)
- Can convert appropriately between measures to help solve the problem | 50% (0.5%)

Geometry: Properties of shape | 5%

Identify 3D shapes, including cubes and other cuboids, from 2D representations | 16.67% (0.83%)

- Name 3D shapes from pictures | 33.34% (0.28%)
- Identify the 3D shapes represented by 2D nets | 33.33% (0.28%)
- Identify nets of a cube | 33.33% (0.28%)

Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles | 16.67% (0.83%)

- Can explain that angles are measured in degrees | 25% (0.21%)
- Can identify acute, obtuse and reflex angles | 25% (0.21%)
- Can estimate the size of acute, obtuse and reflex angles | 25% (0.21%)
- Can compare and order a set of angles | 25% (0.21%)

Draw given angles, and measure them in degrees (°) | 16.66% (0.83%)

- Can use a protractor to measure angles accurately in degrees both on their own and within shapes | 50% (0.42%)
- Can draw given angles using a protractor | 50% (0.42%)

Identify, angles at a point and one whole turn (total 360°), angles at a point on a straight line and 1/2 a turn (total 180°) and other multiples of 90° | 16.67% (0.83%)

- Can recognise that angles at a point make a whole turn and total 360° | 25% (0.21%)
- Can recognise that angles on a straight line make half a turn and total 180° | 25% (0.21%)
- Can recognise multiples of 90° within turns | 25% (0.21%)
- Can calculate missing angles in a range of contexts | 25% (0.21%)

Use the properties of rectangles to deduce related facts and find missing lengths and angles | 16.67% (0.83%)

- Know that a rectangle has two pairs of equal and parallel sides | 16.67% (0.14%)
- Know that a rectangle has four right-angles | 16.67% (0.14%)
- Explain why a square is a type of rectangle | 16.67% (0.14%)
- Find missing lengths of rectangles | 16.67% (0.14%)
- Identify the diagonals of rectangles | 16.67% (0.14%)
- Make suggestions about the size of angles formed between the parallel sides of a rectangle and its diagonals | 16.67% (0.14%)

Distinguish between regular and irregular polygons based on reasoning about equal sides and angles | 16.66% (0.83%)

- Recognise that a regular polygon has n equal sides and n equal angles | 25% (0.21%)
- Identify regular and irregular polygons from a set of shapes and explain why | 25% (0.21%)
- Identify a square as the only regular quadrilateral | 25% (0.21%)
- Sort shapes based on their properties, using Venn and Carroll diagrams | 25% (0.21%)

Geometry: Position & Direction | 5%

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 | 100% (5%)

- Can describe the position of a shape after it has been reflected in a line that is parallel to an axis | 50% (2.5%)
- Can describe the position of a shape after it has been translated across and up | 50% (2.5%)

Statistics | 5%

Solve comparison, sum and difference problems using information presented in a line graph | 50% (2.5%)

- Answer questions that involve comparing the values between two points on a line graph, *e.g.* when does the temperature rise the quickest? | 25% (0.63%)
- Answer questions that involve finding the difference between two points on a line graph, *e.g.* by how much does the temperature rise between 1 and 2pm? | 25% (0.63%)
- Answer questions that involve finding the sum of values on a line graph, *e.g.* how far did the lorry driver travel in total? | 25% (0.63%)
- Accurately draw a line graph based on sourced data | 25% (0.63%)

Complete, read and interpret information in tables, including timetables | 50% (2.5%)

- Answer questions that involve timetables, *e.g.* how long does the journey from Chester to Northwich take on the bus? | 100% (2.5%)

Year 6

Number & place value | 10%

Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit | 25% (2.5%)

- Explain the place value in numbers up to 10,000,000 | 20% (0.5%)
- Order a set of numbers to 10,000,000 | 20% (0.5%)
- Understand how a number can be partitioned into different amounts | 20% (0.5%)
- Multiply and divide numbers by 10 and 1000 and explain the effect on the size of the digits in the number | 20% (0.5%)
- Compare numbers to 10,000,000 | 20% (0.5%)

Round any whole number to a required degree of accuracy | 25% (2.5%)

- Round numbers to the nearest 1,000,000 | 50% (1.25%)
- Estimate the answers to calculations by rounding and comparing answers | 50% (1.25%)

Use negative numbers in context, and calculate intervals across zero | 25% (2.5%)

Solve problems involving negative numbers linked to temperature, money and measures, e.g. find the difference between two temperatures when one is negative | 100% (2.5%)

Solve problems involving place value, including word problems and problems linked to population of countries, money and measure | 25% (2.5%)

Solve problems involving place value, including word problems and problems linked to population of countries, money and measure | 100% (2.5%)

Addition and Subtraction | 15%

Perform mental calculations, including with mixed operations and large numbers | 25% (3.75%)

Perform mental calculations, including with mixed operations and large numbers | 100% (3.75%)

Use their knowledge of the order of operations to carry out calculations involving the four operations | 25% (3.75%)

- Can understand and use brackets | 50% (1.88%)
- Understand the order of BODMAS and use this to solve calculations | 50% (1.88%)

Solve problems involving addition, subtraction, multiplication and division | 25% (3.75%)

Solve problems including those with more than one step | 100% (3.75%)

Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy | 25% (3.75%)

- Can use estimating to consider whether their answer is appropriate | 50% (1.88%)

- Can use the inverse to check the answer | 50% (1.88%)

Multiplication and Division | 20%

Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication | 20% (4%)

- Use mental strategies to approximate answers to multiplication and division calculations | 50% (2%)
- Use an appropriate formal written method to multiply numbers up to ThHTU by TU | 50% (2%)

Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, interpreting remainders as whole number remainders, fractions, or by rounding, as appropriate for the context | 20% (4%)

- Use a standard written method of long division to divide ThHTU by TU | 50% (2%)
- Interpret remainders accurately | 50% (2%)

Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context | 20% (4%)

- Use a standard written method of short division to divide ThHTU by U | 25% (1%)
- Use a standard written method of short division to divide ThHTU by TU | 25% (1%)
- Interpret remainders accurately | 25% (1%)
- Identify the calculations needed to solve a short division word problem involving more than one step | 25% (1%)

Perform mental calculations, including with mixed operations and large numbers | 20% (4%)

- Decide when to use a mental method, informal jottings or a written method for calculations with all four operations | 33.33% (1.33%)
- Derive facts involving decimals | 33.33% (1.33%)
- Use knowledge of square numbers to derive square of multiples of 10, e.g. 60 x 60 | 33.33% (1.33%)

Identify common factors, common multiples and prime numbers | 20% (4%)

- Identify common factors of 2 digit numbers | 33.34% (1.33%)
- Identify common multiples of 2 digit numbers | 33.33% (1.33%)
- Identify prime numbers to 100 and begin to recall these | 33.33% (1.33%)

Fractions, decimals & % | 20%

Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions | 9.09% (1.82%)

- Use knowledge of equivalent fractions to add fractions | 50% (0.91%)

- Convert mixed numbers into improper fractions | 50% (0.91%)

Associate a fraction with division and calculate decimal fraction equivalents | 9.09% (1.82%)

- Can recall common fraction and decimal equivalents | 50% (0.91%)
- Can explore recurring equivalence of decimals and fractions | 50% (0.91%)

Compare and order fractions, including fractions > 1 | 9.09% (1.82%)

- Can convert fractions into common denominators | 50% (0.91%)
- Can use decimal equivalence to order and compare fractions | 50% (0.91%)

Divide proper fractions by whole numbers | 9.09% (1.82%)

- Can divide a proper fraction by a whole number | 50% (0.91%)
- Can explain how to divide a proper fraction, using diagrams if necessary to show understanding | 50% (0.91%)

Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places | 9.09% (1.82%)

Understands the effect of multiplying and dividing a decimal by 10, 100 and 1000 | 100% (1.82%)

Multiply simple pairs of proper fractions, writing the answer in its simplest form | 9.09% (1.82%)

- Understand when multiplying by a fraction the answer will be smaller | 50% (0.91%)
- Can follow a standard method to multiply fractions | 50% (0.91%)

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination | 9.09% (1.82%)

- Understand equivalent fractions have common multiples | 50% (0.91%)
- Can simplify fractions by dividing the numerator and denominator by a common factor | 50% (0.91%)

Multiply one-digit numbers with up to two decimal places by whole numbers | 9.09% (1.82%)

- Can use an appropriate formal written method to multiply numbers up to U.th by U | 33.34% (0.61%)
- Can use mental strategies to approximate answers to multiplication calculations | 33.33% (0.61%)
- Can say why an answer to a multiplication involving 2 decimal places cannot be correct, e.g. Sam says the answer to 2.34 x 4 is 93.6. Explain why he cannot be correct | 33.33% (0.61%)

Use written division methods in cases where the answer has up to two decimal places | 9.09% (1.82%)

- Can use an appropriate formal method to divide a number with U.th by a single digit, e.g. in the context of money £4.35 ÷ 3 | 33.34% (0.61%)
- Can use an appropriate formal method to divide a whole number with a remainder by a single digit, extending their working into decimal places, e.g. £178 ÷ 8 | 33.33% (0.61%)
- Can interpret decimal answers in context, e.g. what does 5.6 represent if it is in the context of money? Mass? Length? | 33.33% (0.61%)

Solve problems which require answers to be rounded to specified degrees of accuracy | 9.09% (1.82%)

- Can choose and use appropriate methods of calculation using all four operations | 50% (0.91%)
- Can decide whether to round an answer to the nearest tenth, whole number or higher value place, in context, e.g. approximately how many metres of fabric should I buy if I need to make 3 dresses which each use 1.34m? | 50% (0.91%)

Recall and use equivalences between simple fractions, decimals and percentages | 9.09% (1.82%)

- Can recognise simple fraction, decimal and percentage equivalences in context including ½ = 0.5, ¼ = 0.25, ¾ = 0.75, 1/10 = 0.1, 1/5 = 0.2 | 33.34% (0.61%)
- Can recognise other equivalent fractions, decimals and percentages with the same denominator, e.g. if 1/10 = 0.1, 3/10 = ? | 33.33% (0.61%)
- Can explain why 6/10 is more than 50% | 33.33% (0.61%)

Measurement | 10%

Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate | 14.3% (1.43%)

- Can recall approximate conversions and is able to tell if an answer is sensible | 50% (0.72%)
- Can use decimal notation in a variety of formats to solve a problem | 50% (0.72%)

Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places | 14.3% (1.43%)

- Can explain the relationship between conversions | 50% (0.72%)
- Can make estimates based on approximate conversions. 1 litre is approximately 2 pints (more accurately, 13/4 pints). 4.5 litres is approximately 1 gallon or 8 pints. 1 kilogram is approximately 2lb (more accurately, 2.2lb). 30 grams is approximately 1 oz. 8 | 50% (0.72%)

Convert between miles and kilometres | 14.28% (1.43%)

Can use the conversion of miles to km to apply to other facts | 100% (1.43%)

Recognise that shapes with the same areas can have different perimeters and vice versa | 14.28% (1.43%)

- Can measure and calculate the perimeter and area of composite rectilinear shapes | 33.34% (0.48%)
- Can calculate the perimeters of compound shapes that can be split into rectangles | 33.33% (0.48%)
- Can identify shapes that have the same area but have different perimeters | 33.33% (0.48%)

Recognise when it is possible to use formulae for area and volume of shapes | 14.28% (1.43%)

- Understands when to use a formula to find the area of a shape | 50% (0.71%)
- Understands when to use the formula to find the volume of a shape | 50% (0.71%)

Calculate the area of parallelograms and triangles | 14.28% (1.43%)

- Can calculate the area of right angled triangles using their knowledge of a square or rectangle | 33.34% (0.48%)
- Can generalise how to find the area of a triangle | 33.33% (0.48%)
- Can calculate the area of a parallelogram using their knowledge of squares, rectangles and triangles | 33.33% (0.48%)

Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), extending to other units [for example, mm3 and km3] | 14.28% (1.43%)

- Can compare and order the volume of different shapes using estimates | 50% (0.71%)
- Can calculate the volume of a shape using the formula | 50% (0.71%)

Geometry: Properties of shape | 5%

Draw 2D shapes using given dimensions and angles | 20% (1%)

- Identify, visualise and describe properties of rectangles, triangles and regular polygons | 16.67% (0.17%)
- Use a ruler to measure accurately within 1mm | 16.67% (0.17%)
- Use a ruler to draw lines accurately within 2mm | 16.67% (0.17%)
- Use a protractor to measure angles accurately within 1 degree | 16.67% (0.17%)
- Use a protractor to draw angles accurately within 2 degrees | 16.67% (0.17%)
- Construct a triangle given two sides and the included angle | 16.67% (0.17%)

Recognise, describe and build simple 3D shapes, including making nets | 20% (1%)

- Identify, visualise and describe properties of 3D solids | 33.34% (0.33%)
- Identify 3D shapes from their nets and explain why, including open and closed cubes | 33.33% (0.33%)
- Draw nets of 3D shapes with given dimensions | 33.33% (0.33%)

Compare and classify geometric shapes based on their properties and sizes. Find unknown angles in any triangles, quadrilaterals, and regular polygons | 20% (1%)

- Recognise the properties of isosceles, right angled, equilateral and scalene triangles | 25% (0.25%)
- Recognise the properties of squares, rectangles, rhombuses, parallelograms, trapeziums and kites | 25% (0.25%)
- Explain why a polygon is regular or irregular | 25% (0.25%)
- Find unknown angles in all triangles, given one angle | 25% (0.25%)

Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius | 20% (1%)

- Know that the circumference is the distance around a circle | 25% (0.25%)
- Know that the radius is the distance from the centre to the circumference | 25% (0.25%)
- Know that the diameter is 2x the radius | 25% (0.25%)
- Use the formula C = pd to work out the circumference of a circle | 25% (0.25%)

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite. Find missing angles | 20% (1%)

- Estimate angles | 12.5% (0.13%)
- Use a protractor to measure angles on their own and in shapes | 12.5% (0.13%)
- Use a protractor to draw angles on their own and in shapes | 12.5% (0.13%)
- Know that the angle sum of a triangle is 180° | 12.5% (0.13%)
- Know that the angles on a straight line add to 180° | 12.5% (0.13%)
- Know that the sum of angles around a point is 360° | 12.5% (0.13%)
- Recognise vertically opposite angles and know that they are equal | 12.5% (0.13%)
- Find missing angles in a variety of contexts | 12.5% (0.13%)

Geometry: Position & Direction | 5%

Describe positions on the full coordinate grid (all four quadrants) | 50% (2.5%)

- Can describe the vertices of a shape in all four quadrants | 50% (1.25%)
- Can use the properties of a shape to complete the vertices of the shape | 50% (1.25%)

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes | 50% (2.5%)

- Can draw a shape after a reflection of a simple shape in two mirror lines | 50% (1.25%)
- Can draw a shape after a shape has been translated across the four quadrants | 50% (1.25%)

Statistics | 5%

Interpret and construct pie charts and line graphs and use these to solve problems | 50% (2.5%)

- Use knowledge of fractions and percentages to interpret pie charts | 33.33% (0.83%)
- Construct a simple pie chart using common fractions | 33.33% (0.83%)

- Interpret a line graph when the answer lies between two given intervals | 33.33% (0.83%)

Calculate and interpret the mean as an average | 50% (2.5%)

- Calculate the mean of a set of numbers | 50% (1.25%)
- Understand that the mean is an average and understand when it is appropriate to find the mean of a set of data | 50% (1.25%)

Ratio & Proportion | 5%

Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts | 25% (1.25%)

- Understands ratio as a comparison of one part or amount with another | 33.34% (0.42%)
- Can confidently use the language of 'for every' when describing a ratio | 33.33% (0.42%)
- Can use ratio to show the relative size of two quantities | 33.33% (0.42%)

Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples | 25% (1.25%)

Can investigate possible answers to a question where one fraction has an impact on the other | 100% (1.25%)

Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison | 25% (1.25%)

- Understands proportion as a fraction of the whole amount | 50% (0.63%)
- Understands proportion as a percentage of the whole amount | 50% (0.63%)

Solve problems involving similar shapes where the scale factor is known or can be found | 25% (1.25%)

- Understands direct proportion by scaling quantities up and down | 50% (0.63%)
- Can scale up/down recipes for a given number | 50% (0.63%)

Algebra | 5%

Use simple formulae | 20% (1%)

- Understands a value can be replaced by a number or a symbol | 25% (0.25%)
- Can solve missing box calculations by using inverse | 25% (0.25%)
- Can substitute values into a formulae to find an answer | 25% (0.25%)
- Can show a good understanding of the equals sign | 25% (0.25%)

Generate and describe linear number sequences | 20% (1%)

- Can create a number sequence given a rule to follow | 33.34% (0.33%)
- Understands a linear equation can be recursive, i.e. one number in the sequence is generated from the preceding number (e.g. by adding 3 to the preceding number) | 33.33% (0.33%)

- Understands a linear equation can be ordinal, i.e. the position of the number in the sequence generates the number (e.g. by multiplying the position by 3, and then subtracting 2) | 33.33% (0.33%)

Express missing number problems algebraically | 20% (1%)

- Can use symbols to express missing number problems | 25% (0.25%)
- Can find values that satisfy the equation and make it a true statement | 25% (0.25%)
- Understands the associative law and can apply it to missing number problems | 25% (0.25%)
- Understands the distributive law and can apply it to missing number problems | 25% (0.25%)

Find pairs of numbers that satisfy an equation with two unknowns | 20% (1%)

Can substitute numbers into unknowns to find a given value where there are limited answers | 100% (1%)

Enumerate possibilities of combinations of two variables | 20% (1%)

Can identify different variables and consider the impact on one when one changes, e.g. list all the combinations of boys and girls in a class where there are twice as many boys as girls and between 25 & 35 children in the class altogether | 100% (1%)