Number and place value:

- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number:
  - count from zero in multiples of *3*, 50 and 100 A1/C1
  - count from zero in multiples of 4, 50 and 100 A2/C2
  - count from zero in multiples of 4, 8, 50 and 100 A3/C3
  - finding 10 or 100 more or less than a given number A3/C3
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
  - *say, read and write numbers up to 1000 and begin to partition. (e.g. 46=40 and 6, but also 46=30+16) A2*
  - recognise the place value of each digit in a three digit number (hundreds, tens, ones) A3
  - *partition numbers to support me with columnar addition and subtraction C2/C3*
- compare and order numbers up to 1000
  - *compare and order numbers up to 500 and use the language greater than, more than, fewer and equal to A1*
  - *complete number sentences using the symbols <, > and = using numbers up to 500 A2*
  - compare and order numbers up to 1000 A3
- identify, represent and estimate numbers using different representations
  - *represent and estimate where to put numbers on different scales up to 100 A1/B1/E1*
  - *represent and estimate where to put numbers on different scales up to 1000. A2/B2/E2*
  - identify, represent and estimate where to put numbers on different scales up to 1000 using different representations A3/B3/E3
- read and write numbers up to 1000 in numerals and in words:
  - read and write numbers up to 1000 A1
  - read and write numbers to *at least* 1000 in numerals and words A3
- solve number problems and practical problems involving these ideas.
  - *explain how I solve practical number problems A1*
  - solve number problems and practical problems A1/A2/A3
  - explain how I solve number problems A2
  - *explain my solutions and methods to everyone in a group A3*

Addition and subtraction:

- add and subtract numbers mentally, including:
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds
- add and subtract a 3 digit number and ones mentally A1/C1
- add and subtract a 3 digit number and tens mentally A2/C2
- add and subtract a 3 digit number and hundreds mentally A3/C3
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- add and subtract numbers with up to three digits C1
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction C2/C3
- estimate the answer to a calculation and use inverse operations to check answers
- estimate the answer to a calculation and use inverses to check my answers A2
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
- solve number problems and practical problems involving these mental skills A1/A2
- solve missing number problems using number facts, place value, and more complex addition & subtraction A3
- *solve a problem by writing down what calculation I should do A3*
- *explain how I solve practical number problems A1*
- *explain how I solve number problems A2*
- *share my views with others in the class and follow up their points A2*
- *decide which of the four operations to use and why when solving simple problems C3*

Multiplication and division:

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
  - recall and use multiplication and division facts for the 3 times table A1/A2
  - recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables A3
  - *recognise and use related multiplication and division facts. (e.g if 2x3=6, Know that 3x2=6, 6÷3=2 and 3=6÷2)A1*
  - *use doubling to connect the 2, 4 and 8 times table A3*
- 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
  - write mathematical statements for multiplication and division C1/C2/C3
  - calculate mathematical statements for multiplication & division using the multiplication tables that they know C1
  - calculate mathematical statements for multiplication & division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers C2
  - calculate mathematical statements for multiplication & division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental & progressing to formal written methods C3
- 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
  - solve number problems and practical problems A1
  - *solve problems involving number relationships* including positive integer scaling problems and correspondence problems in which n objects are connected to m objects *for multiplication tables that I know C1/C2/C3*
  - solve problems, including missing number problems, involving multiplication and division C1/C2/C3
  - *explain how I solve practical number problems A1*
  - *decide which of the four operations to use and why when solving simple problems C1/C2/C3*
  - *solve a problem by writing down what calculation I should do A3*

Fractions

- 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
  - *count up to one in tenths D1*
  - *count in tenths up to and down from 5 D2*
  - *count up and down in tenths D3*
  - *understand the link between tenths and dividing by* 10 D1/D2
  - *understand the place value of tenths D2/D3*
  - *understand the relation between finding a fraction of and division (e.g. know 'half of' is the same as 'dividing by two' D3*
  - recognise that tenths are made by dividing objects into 10 equal parts and by dividing one-digit numbers or quantities by 10 D3
- recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
  - recognise and write fractions of a discrete set of objects for unit and non-unit fractions (*less than 1*) *with denominators 2 and 3 D1*
  - recognise and write fractions of a discrete set of objects for unit and non-unit fractions (*less than 1) with denominators 4 and 5* D2
  - recognise and write fractions of a discrete set of objects for unit and non-unit fractions (*less than 1) with denominators up to 5 and show them on a number line* D3
  - find fractions of a discrete set of objects for unit and non-unit fractions (*less than 1) with denominators 2 and 3* D1
  - find fractions of a discrete set of objects for unit and non-unit fractions (*less than 1*) *with denominators up to 5* D2/D3
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
  - recognise and use fractions as numbers including unit and non-unit fractions *(less than 1) with denominators 2 and 3 on a number line D1*
  - recognise and use fractions as numbers including unit and non-unit fractions *(less than 1) with denominators 4 and 5 on a number line D2*
- recognise and show, using diagrams, equivalent fractions with small denominators
  - *begin* to recognise and show equivalent fractions (for fractions with *denominators up to 4*) using diagrams D1
  - recognise and show equivalent fractions (for fractions with *denominators up to 6*) using diagrams D2
  - recognise and show equivalent fractions (for fractions with *denominators up to 8*) using diagrams D3
- add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]
  - add unit fractions with the same denominator within one whole (e.g. ⅓ + ⅓ = ⅔) D1
  - add fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) D2
  - add and subtract unit fractions with the same denominator within one whole (e.g. $\frac{5}{7} - \frac{1}{7} = \frac{4}{7}$) D3
- compare and order unit fractions, and fractions with the same denominators
  - compare and order fractions with the same denominators D1

- compare and order unit fractions D2
- compare and order unit fractions, and fractions with the same denominator D3
- solve problems that involve all of the above
- solve problems involving all the topics in this unit *in different contexts including measures D1/D2/D3*

Measurement:

- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- *draw and measure straight lines in centimetres B1/E1*
- measure lengths (m/cm/mm) and mass (kg/g) E1
- measure lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) E2/E3
- compare lengths (m/cm/mm) and mass (kg/g) E1
- compare lengths (m/cm/mm): mass (kg/g) and volume/capacity (l/ml) E2
- compare lengths,(m/cm/mm); mass (kg/g); volume/capacity (l/ml) *and recognise simple equivalents in mixed units (e.g. 5m = 500cm) E3*
- add and subtract lengths (m/cm/mm) and mass (kg/g) E1
- add & subtract lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) E2
- add and subtract lengths (m/cm/mm); mass (kg/g) and volume/capacity (l/ml) *using mixed units (e.g. 1 kg and 200g)E3*
- *calculate scaling of measures (e.g. a given quantity or measure is twice as long or five times as high)* E3
- measure the perimeter of simple 2-D shapes
- measure the perimeter of simple 2-D shapes E1/E2
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- add & subtract amounts of money to give change, using both £ and p in practical contexts E1
- add & subtract amounts of money to give change, using both £ & p in practical contexts *& record using £ & p notation E2*
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- tell and write the time from an analogue clock and 12-hour clocks E1
- tell and write the time from an analogue clock and 12-hour and 24-hour clocks E2
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks E3
- 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
- estimate & read time with increasing accuracy to the nearest minute E1
- record and compare time in terms of seconds, minutes, hours and o'clockE2
- use vocabulary such as am/pm, morning, afternoon, noon and midnight E3
- know the number of seconds in a minute and the number of days in each month, year and leap year
- know the number of seconds in a minute E1
- know the number of seconds in a minute and the number of days in each month. E2
- know the number of seconds in a minute and the number of days in each month, year and leap year E3
- compare durations of events [for example to calculate the time taken by particular events or tasks].
- compare durations of events E1
- *solve problems involving measures including time, for example to calculate the time taken by particular events or tasks E1/E2/E3*

Properties of shapes:

- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- draw 2-D shapes B1
- draw 2-D shapes and make 3-D shapes using modelling materials B2
- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them B3
- *describe the properties of 2-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle B1*
- *describe the properties of 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or less than a right angle B2*
- *describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or less than a right angle B3*
- *sort and classify shapes in a variety of ways by comparing their properties B1*
- *sort and classify an increasing number of shapes in a variety of ways by comparing their properties B2*
- *sort and classify and increasing number of shapes in a variety of ways by comparing their properties B3*
- *solve problems involving the shapes in this unit B1/B2/B3*

- recognise angles as a property of shape or a description of a turn
  - recognise that angles are a property of shape or a description of a turn B1/B3
  - *solve problems involving direction and position using the skills in this unit B1/B2/B3*
- 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
  - identify right angles and recognise that two right angles make a half-turn B1
  - identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn B2
  - identify whether angles are greater than or less than a right angle B3
- identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
  - identify horizontal and vertical lines B1
  - identify horizontal and vertical lines and pairs of parallel lines B2
  - identify horizontal and vertical lines and pairs of perpendicular and parallel lines B3

Statistics:

- interpret and present data using bar charts, pictograms and tables
  - interpret data using bar charts, pictograms and tables E1
  - interpret data using bar charts, pictograms and tables *in an increasing range of contexts* E2
  - interpret data using bar charts, pictograms and tables *in many contexts* E3
  - present data using bar charts, pictograms and tables E1
  - present data using bar charts, pictograms and tables *in an increasing range of contexts* E2
  - present data using bar charts, pictograms and tables *in many contexts* E3
  - *use scales to record data in charts (e.g. 2, 5 and 10 units per centimetre) in pictograms and bar charts E1/E2/E3*

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

- solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables E1/E2/E3