

# End of Year Expectations in Maths EYFS - Year 6

# **EYFS**

#### Number

30-50

- → Uses some number names and number language spontaneously.
- $\rightarrow$  Uses some number names accurately in play.
- $\rightarrow$  Recites numbers in order to 10.
- → Knows that numbers identify how many objects are in a set.
- → Beginning to represent numbers using fingers, marks on paper or pictures.
- → Sometimes matches numeral and quantity correctly.
- → Shows curiosity about numbers by offering comments or asking questions.
- → Compares two groups of objects, saying when they have the same number.
- → Shows an interest in number problems.
- → Separates a group of three or four objects in different ways,
- → beginning to recognise that the total is still the same.
- → Shows an interest in numerals in the environment.
- $\rightarrow$  Shows an interest in representing numbers.
- → Realises not only objects, but anything can be counted, including steps, claps or jumps.

40 - 60 +

- Recognise some numerals of personal significance.
- $\rightarrow$  Recognises numerals 1 to 5.
- → Counts up to three or four objects by saying one number name for each item.
- → Counts actions or objects which cannot be moved.
- → Counts objects to 10, and beginning to count beyond 10.
- ightarrow Counts out up to six objects from a larger group.
- → Selects the correct numeral to represent 1 to 5, then 1 to 10 objects.
- ightarrow Counts an irregular arrangement of up to ten objects.
- ightarrow Estimates how many objects they can see and checks by counting them.
- → Uses the language of 'more' and 'fewer' to compare two sets of objects.
- → Finds the total number of items in two groups by counting all of them.
- → Says the number that is one more than a given number.
- → Finds one more or one less from a group of up to five objects, then ten objects.
- → In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
- $\rightarrow$  Records, using marks that they can interpret and explain.

→ Begins to identify own mathematical problems based on own interests and fascinations.

#### ELG

- → Children count reliably with numbers from one to 20,
- → place them in order and say which number is one more or one less than a given number.
- $\rightarrow$  Using quantities and objects:
- → add and subtract two single-digit numbers and count on or back to find the answer.
- ightarrow solve problems, including doubling, halving and sharing.

# **EYFS**

### Shape and Space

30-50

- → Shows an interest in shape and space by playing with shapes or making arrangements with objects.
- → Shows awareness of similarities of shapes in the environment.
- → Uses positional language.
- → Shows interest in shape by sustained construction activity or by talking about shapes or arrangements.
- → Shows interest in shapes in the environment.
- $\rightarrow$  Uses shapes appropriately for tasks.
- → Beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'.

40 - 60 +

- Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2-D shapes, and mathematical terms to describe shapes.
- → Selects a particular named shape.
- → Can describe their relative position such as 'behind' or 'next to'.
- → Orders two or three items by length or height.
- $\rightarrow$  Orders two items by weight or capacity.
- → Uses familiar objects and common shapes to create and recreate patterns and build models.
- → Uses everyday language related to time.
- ightarrow Beginning to use everyday language related to money.
- $\rightarrow$  Orders and sequences familiar events.
- $\rightarrow$  Measures short periods of time in simple ways.

#### ELG

- use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
- $\rightarrow$  recognise, create and describe patterns.
- explore characteristics of everyday objects and shapes and use mathematical language to describe them.

# Year 1

#### Number - Number and Place Value

#### I can:

- → count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.
- → count, read and write numbers to 100 in numerals;
- $\rightarrow$  count in multiples of twos, fives and tens.
- → given a number, identify one more and one less.
- → 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.
- → read and write numbers from 1 to 20 in numerals and words.

## Number - Addition and Subtraction

#### I can:

- → read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.
- → represent and use number bonds and related subtraction facts within 20.
- → add and subtract one-digit and two-digit numbers to 20, including zero
- → solve one-step problems that involve addition → and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = -9.

## Number - Multiplication and Division

#### I can:

→ 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.

#### Number - Fractions

#### I can:

- → recognise, find and name a half as one of two equal parts of an object, shape or quantity.
- → recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

#### Measurement

#### I can:

- compare, describe and solve practical problems for:
  - lengths and heights [for example, long/ short, longer/shorter, tall/short, double/ half]
  - mass/weight [for example, heavy/light, heavier than, lighter than]
  - capacity and volume [for example, full/ empty, more than, less than, half, half full, quarter]
  - time [for example, quicker, slower, earlier, later]
- $\rightarrow$  measure and begin to record the following:
  - lengths and heights
  - mass/weight
  - capacity and volume
  - time (hours, minutes, seconds)

- → recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- → recognise and use language relating to dates, including days of the week, weeks, months and years
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

## Geometry - Properties of Shapes

#### I can:

- → recognise and name common 2-D and 3-D shapes, including:
  - 2-D shapes [for example, rectangles (including squares), circles and triangles]
  - 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

# $\label{eq:Geometry-Position} \textbf{Geometry-Position and Direction}$

#### I can:

→ describe position, direction and movement, including whole, half, quarter and threequarter turns.

#### I can:

- → count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- → recognise the place value of each digit in a two-digit number (tens, ones)
- → identify, represent and estimate numbers using different representations, including the number line
- $\rightarrow$  compare and order numbers from 0 up to 100; use <, > and = signs
- → read and write numbers to at least 100 in numerals and in words
- → use place value and number facts to solve problems.

# Number – Addition and Subtraction

## I can:

- → solve problems with addition and subtraction:
  - using concrete objects and pictorial representations,
  - including those involving numbers, quantities and measures
  - applying my increasing knowledge of mental and written methods
- → recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- → 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

# Year 2

- adding three one-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

# ${\bf Number-Multiplication} \ {\bf and \ Division}$

I can:

- → recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- → calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\*), division (÷) and equals (=) signs
- → show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

## Number - Fractions

I can:

→ recognise, find, name and write fractions 1/3, 1/4, 2/4, and 3/4 of a length, shape, set of objects or quantity

→ write simple fractions for example, 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2

#### Measurement

I can:

- → 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
- → compare and order lengths, mass, volume/ capacity and record the results using >, < and</p>
- → recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- → solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- → compare and sequence intervals of time
- → 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
- → know the number of minutes in an hour and the number of hours in a day.

# Geometry – Properties of Shapes

- → identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
- $\rightarrow$  identify and describe the properties of 3-D

shapes, including the number of edges, vertices and faces

- → identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
- → compare and sort common 2-D and 3-D shapes and everyday objects.

## Geometry - Position and Direction

I can:

- order and arrange combinations of mathematical objects in patterns and sequences
- → 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 anticlockwise).
- → ask and answer questions about totalling and comparing categorical data.

#### **Statistics**

I can:

- → interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- → ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- → ask and answer questions about totalling and comparing categorical data.

# Year 2

#### I can:

- → count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- → recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- $\rightarrow$  compare and order numbers up to 1000
- → identify, represent and estimate numbers using different representations
- → read and write numbers up to 1000 in numerals and in words
- → solve number problems and practical problems involving these ideas.

#### Number - Addition and Subtraction

#### I can:

- → 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 numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- → solve problems, including missing number facts, place value, and more complex addition and subtraction.

# Number - Multiplication and Division

## I can:

→ recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

# Year 3

- → write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times onedigit numbers, using mental and progressing to formal written methods
- → 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.

#### Number - Fractions

#### I can:

- → 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
- recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
- → recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- → recognise and show, using diagrams, equivalent fractions with small denominators
- → add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]
- → compare and order unit fractions, and fractions with the same denominators

ightarrow solve problems that involve all of the above.

#### Measurement

#### I can:

- → measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- $\rightarrow$  measure the perimeter of simple 2-D shapes
- → add and subtract amounts of money to give change, using both £ and p in practical contexts
- 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
- → tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- know the number of seconds in a minute and the number of days in each month, year and leap year
- → compare durations of events [for example to calculate the time taken by particular events or tasks].

## Geometry - 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
- → recognise angles as a property of shape or a description of a turn

- → 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 horizontal and vertical lines and pairs of perpendicular and parallel lines.

#### **Statistics**

I can:

- → interpret and present data using bar charts, pictograms and tables
- → 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.

# Year 3

#### I can:

- $\rightarrow$  count in multiples of 6, 7, 9, 25 and 1000
- $\rightarrow$  find 1000 more or less than a given number
- → count backwards through zero to include negative numbers
- → recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- $\rightarrow$  order and compare numbers beyond 1000
- → solve number and practical problems that involve all of the above and with increasingly large positive numbers
- → 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.

# Number – Addition and Subtraction

#### I can:

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- → estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

# Number - Multiplication and Division

#### I can:

→ recall multiplication and division facts for multiplication tables up to 12 × 12

# Year 4

- → use place value, known and derived facts to multiply and divide mentally, including: multiplying by O and 1; dividing by 1; multiplying together three numbers
- → recognise and use factor pairs and commutativity in mental calculations
- → multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- → 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.

#### Number - Fractions

#### I can:

- → recognise and show, using diagrams, families of common equivalent fractions
- → count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- → 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
- → add and subtract fractions with the same denominator
- → recognise and write decimal equivalents of any number of tenths or hundredths

- $\rightarrow$  recognise and write decimal equivalents to 1/4, 1/2,  $\frac{3}{4}$
- → 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
- → round decimals with one decimal place to the nearest whole number
- → compare numbers with the same number of decimal places up to two decimal places
- → solve simple measure and money problems involving fractions and decimals to two decimal places.

#### Measurement

- → convert between different units of measure [for example, kilometre to metre; hour to minute]
- 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
- → tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- → know the number of seconds in a minute and the number of days in each month, year and leap year
- → compare durations of events [for example to calculate the time taken by particular events or tasks].

## Geometry - Properties of Shapes

I can:

- → draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- → recognise angles as a property of shape or a description of a turn
- → 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 horizontal and vertical lines and pairs of perpendicular and parallel lines.

#### **Statistics**

I can:

- → interpret and present data using bar charts, pictograms and tables
- → 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.
- → 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 horizontal and vertical lines and pairs of perpendicular and parallel lines.

# Year 4

#### **Statistics**

- interpret and present data using bar charts, pictograms and tables
- → 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.

# Year 5

#### Number - Number and Place Value

#### I can:

- → read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- → count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- → interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- → round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- → solve number problems and practical problems that involve all of the above
- → read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

#### Number - Addition and Subtraction

#### I can:

- → add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- → add and subtract numbers mentally with increasingly large numbers
- → use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- → solve addition and subtraction multi-step

problems in contexts, deciding which operations and methods to use and why.

#### Number - Multiplication and Division

#### I can:

- → identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- → know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers
- → establish whether a number up to 100 is prime and recall prime numbers up to 19
- → multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for twodigit numbers
- → multiply and divide numbers mentally drawing upon known facts
- 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
- → multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- → recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)

- → solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- → solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- → solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

#### Number - Fractions

- → compare and order fractions whose denominators are all multiples of the same number
- → identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- → recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5]
- → add and subtract fractions with the same denominator and denominators that are multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- → read and write decimal numbers as fractions [for example, 0.71 = 71/100]

- → recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- → round decimals with two decimal places to the nearest whole number and to one decimal place
- → read, write, order and compare numbers with up to three decimal places
- ightarrow solve problems involving number up to three ightarrow decimal places
- → recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- → solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5, and those fractions with a denominator of a multiple of 10 or 25.

#### Measurement

#### I can:

- → convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- → convert between different units of metric measure (for example, kilometre and millilitre)
- metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)

# Year 5

- → understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- → measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- → 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
- → estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
- → solve problems involving converting between units of time
- → use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

#### Geometry - Properties of Shapes

#### I can:

- → identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- → use the properties of rectangles to deduce related facts and find missing lengths and angles
- → distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

- → know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
- → draw given angles, and measure them in degrees (o)
- → identify angles at a point and one whole turn (total 360o)
- → identify angles at a point on a straight line and half a turn (total 1800)
- → identify other multiples of 90o

## Geometry - Position and Direction

#### I can:

→ 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.

#### **Statistics**

- → solve comparison, sum and difference problems using information presented in a line graph
- → complete, read and interpret information in tables, including timetables.

#### I can:

- → read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- → round any whole number to a required degree of accuracy
- → solve number and practical problems that involve all of the above.
- → solve number and practical problems that involve all of the above.

### Number - Addition and Subtraction

#### I can:

- → solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- → perform mental calculations, including with mixed operations and large numbers
- → use their knowledge of the order of operations to carry out calculations involving the four operations
- → solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

# Number - multiplication and division

#### I can:

 multiply multi-digit numbers up to 4 digits by α two-digit whole number using the formal written method of long

# Year 6

## multiplication

- → divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- 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
- → identify common factors, common multiples and prime numbers
- → perform mental calculations, including with mixed operations and large numbers
- → use my knowledge of the order of operations to carry out calculations involving the four operations
- → solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

#### Number - Fractions

#### I can:

 use common factors to simplify fractions; use common multiples to express fractions in the same denomination

- → compare and order fractions, including fractions > 1
- → add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- → multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 x 1/2 = 1/8]
- $\rightarrow$  divide proper fractions by whole numbers [for example, 1/3  $\div$  2 = 1/6]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]
- → 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
- → multiply one-digit numbers with up to two decimal places by whole numbers
- → use written division methods in cases where the answer has up to two decimal places
- ightarrow solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

#### Measurement

#### I can:

→ solve problems involving the calculation and conversion of units of measure, using decimal

# notation up to three decimal places where appropriate

- → 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
- → convert between miles and kilometres
- → recognise that shapes with the same areas can have different perimeters and vice versa
- → recognise when it is possible to use formulae for area and volume of shapes
- → calculate the area of parallelograms and triangles
- → calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3].

# Geometry – Properties of Shapes

#### I can:

- → draw 2-D shapes using given dimensions and angles
- → recognise, describe and build simple 3-D shapes, including making nets
- → compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

# Year 6

- → illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- → recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

## Geometry - Position and Direction

#### I can:

- → describe positions on the full coordinate grid (all four quadrants)
- → draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

#### **Statistics**

#### I can:

- → interpret and construct pie charts and line graphs and use these to solve problems
- → calculate and interpret the mean as an average.

## **Ratio and Proportion**

#### I can:

- → solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- → solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- → solve problems involving similar shapes where the scale factor is known or can be found

→ solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

## Algebra

- → use simple formulae
- → generate and describe linear number sequences
- → express missing number problems algebraically
- → find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables