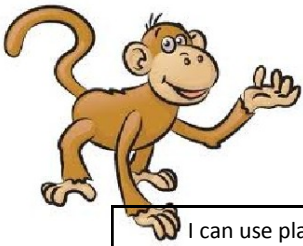


Mathematics Programmes of Study

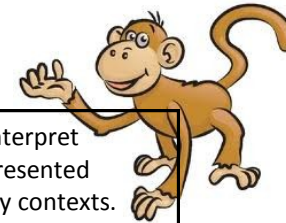
| | | | | | | |
|--|--|---|---|--|---|---|
| I can read and write numbers from 1 to 20 in digits and words. | | | | | | I can tell the time to the hour and half past the hour. |
| I can find one more or one less of a given number. | I can solve one step problems using subtraction. | I can count in 2s, 5s and 10s. | I can solve simple half and quarter problems. | I know and use words relating to dates such as days, weeks & months. | I can describe position, directions and movements. | |
| I can count in multiples of 10. | I can solve one step problems using addition. | I can solve simple division problems. | I can find and name a quarter of a quantity. | I can recognise and know the value of coins and notes. | I can order and arrange combinations of objects and shapes in patterns. | |
| I can count in multiples of 5. | I can add and subtract 2 digit numbers to 20. | I can solve simple multiplication problems. | I can find and name a half of a shape. | I am beginning to measure and record time. | I can recognise/name 2-D and 3-D shapes in different sizes. | I can organise information in a simple way. |
| I can count in multiples of 2. | I can add and subtract one digit numbers to 20. | I can complete simple number patterns. | I can find and name a quarter of an object. | I am beginning to measure and record capacity and volume. | I can recognise and name 3-D shapes from everyday objects. | I can read information from a simple table. |
| I can count in multiples of 1. | I can show and use subtraction facts within 20. | I can show multiplication using arrays. | I can find and name a half of a quantity. | I am beginning to measure and record mass /weight. | I can recognise and name 2-D shapes from everyday objects. | I can read simple information from a block diagram. |
| I can count, read and write numbers to 100. | I can show and use Number bonds to 20. | I can share and group small amounts. | I can find and name a half of a shape. | I am beginning to measure and record lengths and heights. | I can recognise and name 3-D shapes. | I can read simple information from a tally chart. |
| I can count to and across 100, forwards and backwards. | I can read, write and understand calculations with +, - and = signs. | I can double single digit numbers. | I can find and name a half of an object. | I can compare, describe and solve problems involving measures. | I can recognise and name 2-D shapes. | I can read simple information from a pictogram. |
| Number, place value & rounding | Addition and Subtraction | Multiplication and Division | Fractions | Measures | Geometry | Data |



2

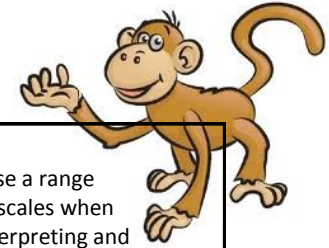
Mathematics Programmes of Study

| | | | | | | |
|---|--|---|--|---|---|--|
| I can use place value and number facts to solve problems. | I can recognise and use inverse relationships between + and -. | I can solve 1 step problems involving multiplication and division. | | I can tell and write the time to the nearest 5 minutes. | | I can organise information using 'many-to-one' in pictograms using simple ratios (2,5 and 10). |
| I can read and write numbers to at least 100 in numerals and words. | I can show that addition can be done in any order and subtraction can't. | I know that of 1 number by an other can not be done in any order. | I can solve simple problems involving fractions. | I can compare and sequence intervals of time. | I can use mathematical vocabulary to describe position, direction and movement. | I can ask and answer questions when comparing categorical data. |
| I can use the <, > and = signs. | I can add and subtract 2 digit numbers and 10s and 2, 2 digit numbers. | I can show that X of 2 numbers can be done in any order. | I can count in fractions up to 10 starting from any number. | I can solve simple problems in a practical context for money. | I can order and arrange combinations of objects in patterns. | I can ask and answer questions about totalling. |
| I can compare and order numbers from 0 up to 100. | I can add and subtract a 2 digit number and ones and tens. | I can recognise and use inverse relationships between X and division. | I can write simple fractions and recognise equivalence. | I can recognise and use symbols for pounds and pence. | I can compare and sort common 2-D and 3-D shapes . | I can ask and answer simple questions by sorting categories by quantity. |
| I can identify, represent and estimate numbers. | I can recall and use + and - facts to 20 and use number facts to 100. | I can calculate mathematical statements for division. | I can recognise, find, name and write fractions of a quantity. | I can read relevant scales to the nearest numbered unit. | I can identify 2-D shapes on the surface of 3-D shape. | I can interpret and construct simple tables. |
| I know the place value of each digit in a 2 digit number. | I can apply written strategies to problems. | I can calculate mathematical statements for X. | I can find, name and write fractions of a set of objects. | I can compare and order length, mass, volume/capacity. | I can identify and describe the properties of 3-D shapes. | I can interpret and construct simple block diagrams. |
| I can count forwards and backwards in tens from any number, | I can apply mental strategies to problems. | I can recognise odd and even numbers. | I can recognise, find, name and write fractions of a shape. | I can use different equipment to measure accurately. | I can identify lines of symmetry in 2-D shapes. | I can interpret and construct simple tally charts. |
| I can count in steps of 2,3 and 5 from 0. | I can solve simple one step problems with addition and subtraction. | I can recall and use X and ÷ facts for the 2, 5 and 10 X tables. | I can recognise, find, name and write fractions of a length. | I use the correct standard units to estimate and measure. | I can identify and describe the properties of 2-D shapes. | I can interpret and construct simple pictograms. |
| Number, place value & rounding | Addition and Subtraction | Multiplication and Division | Fractions | Measures | Geometry | Data |



Mathematics Programmes of Study

| | | | | | | |
|---|---|--|--|--|---|--|
| I can solve number problems and practical problems. | I can solve missing number problems for + and –. | I can solve missing number problems using multiplication and division. | I can solve problems that involve fractions. | I can compare durations of events. | I can identify horizontal, vertical, perpendicular and parallel lines in relation to other lines. | I can interpret data presented in many contexts. |
| I can read and write numbers to at least 1000 in numerals and words. | I can solve word problems for + and –. | I can solve problems using multiplication and division. | I can compare and order fractions with the same denominator. | I know the number of seconds in a minute and the number of days in each month, year and leap year. | I can identify whether angles are greater than or less than a right angle. | I can use simple scales (e.g. 2,5,10 units per cm) in pictograms and bar charts. |
| I can identify, represent and estimate numbers in different contexts. | I can estimate the answer to a calculation and use inverse operations to check answers. | I can use efficient written methods to X a 2 digit and 1 digit number. | I can + and - fractions with the same denominator within 1 whole. | I can recognise and write the Roman numerals from I to XII. | I know that 2 right angles make a half turn, 3 make 3/4 of a turn and 4 make a complete turn. | I can solve two step problems such as 'How many more? How many fewer?' |
| I can compare and order number up to 1000. | I can - numbers with up to 3 digits using an efficient written method. | I can use mental strategies to multiply a 2 digit number by a 1 digit. | I can recognise and show, using diagrams, equivalent fractions. | I can tell and write the time from an analogue clock and 24 hour clock. | I can identify right angles. | I can solve one step problems such as 'How many more? How many fewer?' |
| I can recognise the place value of each digit in a 3 digit number. | I can + numbers with up to 3 digits using an efficient written method. | I can calculate mathematical statements for X and ÷ facts that I know. | I can recognise and use fractions as numbers. $\frac{1}{4} + \frac{3}{4} = 1$ | I can + and – amounts of money to give change using £ and p. | I can recognise angles as a property of shapes and associate angles with turning. | I can interpret and present data using tables. |
| I can find 10 or 100 more or less than a given number. | I can + and – numbers mentally - '3 digit number and hundreds'. | I can recall and use X and ÷ facts for the 8 times tables. | I can recognise, find and write fractions for a set of objects. | I can measure the perimeter of simple 2-D shapes. | I can measure, compare, add and subtract volume/capacity (l/ml). | I can interpret and present data using pictograms. |
| I can count from 0 in multiples of 50 and 100. | I can add and subtract numbers mentally - '3 digit number and tens'. | I can recall and use X and ÷ facts for the 4 times tables. | I know that tenths arise from dividing an object into 10 equal parts. | I can measure, compare, add and subtract mass (kg/g). | I can recognise and describe 3-D shapes in different orientations. | I can interpret and present data using bar charts. |
| I can count from 0 in multiples of 4 and 8. | I can add and subtract numbers mentally - '3 digit number and ones'. | I can recall and use X and ÷ facts for the 3 times tables. | I can count up and down in tenths. | I can measure, compare, add and subtract lengths (m/cm/mm). | I can make 3-D shapes using modelling materials. | |
| Number, place value & rounding | Addition and Subtraction | Multiplication and Division | Fractions | Measures | Geometry | Data |



Mathematics Programmes of Study

| | | | | | | |
|--|---|---|--|---|---|---|
| I can read Roman numerals to 100 (I to C) and understand how the numeral system changed. | I can solve mental calculations with increasingly large numbers. | I can solve problems involving multiplying and dividing. | I can solve simple measure and money problems involving fractions and decimals to two decimal places. | I can solve problems involving converting from hours to minutes; minutes to seconds; years to months and weeks to days. | I can plot specified points and draw sides to complete a given polygon. | I use a range of scales when interpreting and presenting data. |
| I can solve number and practical problems using place value. | I can solve two-step subtraction problems deciding which operations and methods to use and why. | I can multiply three-digit numbers by a one-digit number. | I can compare numbers with the same number of decimal places. | I can read, write and convert time between analogue and digital 12 and 24-hour clocks. | I can translate shapes. | I can solve 'difference' problems using information presented in bar charts, pictograms, tables and simple line graphs. |
| I can round any number to the nearest 10, 100 or 1000. | I can solve two-step addition problems deciding which operations and methods to use and why. | I can multiply two-digit numbers by a one-digit number. | I can round decimals with 1 decimal place to the nearest whole number. | I can estimate, compare and calculate different measures, including money in pounds and pence. | I can describe position on a 2-D grid as co-ordinates in the first quadrant. | I can solve 'sum' problems using information presented in bar charts, pictograms, tables and simple line graphs. |
| I can identify, represent and estimate numbers. | I can use inverses to check answers to calculations. | I can recognise and use factor pairs in mental calculations. | I can find the effect of \div a number by 10 and 100 and identify the value of the digits in the answer. | I can identify lines of symmetry in 2-D shapes presented in different orientations. | I can complete a simple symmetric figure with respect to a specific line of symmetry. | I can solve 'comparison' problems using information presented in bar charts, pictograms, tables and simple line graphs. |
| I can order and compare numbers beyond 1000. | I can estimate to check answers to calculations. | I can multiply together three numbers. | I can recognise and write decimal equivalents to $1/4$, $1/2$, $3/4$. | I can find the area of rectilinear shapes by counting. | I can identify acute and obtuse angles. | I can interpret and present data using line graphs. |
| I can recognise the place value of each digit in a 4-digit number. | I can subtract numbers with up to 4 digits using efficient written methods. | I can use place value, known and derived facts to divide mentally. | I can recognise and write decimal equivalents of any number of 10ths or 100ths. | I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. | I can compare and order angles up to two right angles by size. | I can interpret and present data using bar charts. |
| I can count backwards through zero to include negative numbers. | I can use place value, known and derived facts to multiply mentally. | I can use place value, known and derived facts to divide mentally. | I can add and subtract fractions with the same denominator. | I can convert between different units of measure (e.g. Kilometre to metre; hour to minute). | I can identify acute and obtuse angles. | I can interpret and present data using bar charts. |
| I can find 100 more or less than a given number. | I can add numbers with up to 4 digits using efficient written methods. | I can recall \times and \div facts for multiplication tables up to 12×12 . | I can identify, name and write equivalent fractions of a given fraction. | I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. | I can identify acute and obtuse angles. | I can interpret and present data using bar charts. |
| I can count in multiples of 6, 7, 9, 25 and 1000. | | | I can count up and down in 100ths and recognise that 100ths arise when dividing an object by 100 and dividing 10ths by 10. | | | |
| Number, place value & rounding | Addition and Subtraction | Multiplication and Division | Fractions and Decimals | Measures | Geometry | Data |



Mathematics Programmes of Study

| | | | | | | |
|--|--|--|--|---|---|---|
| I can recognise years written in Roman numerals. | I can solve multi-step subtraction problems in contexts, deciding which operations and methods to use and why. | I can solve problems including scaling by simple fractions and simple rates. | I can write percentages as a fraction. | I can solve problems involving addition and subtraction of units of measures using decimal notation. | I can distinguish between regular and irregular polygons. | |
| I can read Roman numerals to 1000 (M). | | I can recognise an use square numbers and cube numbers. | I can recognise the % symbol and understand what it means. | | I can state and use the properties of a rectangle to deduce related facts. | |
| I can solve number problems and practical problems. | I can solve multi-step addition problems in contexts, deciding which operations and methods to use and why. | I can X and ÷ whole numbers and those involving decimals by 10, 100 & 1000. | I can solve number problems up to 3 decimal places. | I can solve problems involving converting between units of time. | I can draw shapes using given dimensions and angles. | I can present information using ICT. |
| I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100, 000. | I can use rounding to check answers to calculations. | I can divide numbers up to 4 digits by a 1 digit number using an efficient written method. | I can read, write, order and compare numbers with up to 3 decimal places. | I can recognise and estimate volume and capacity. | I can compare different angles. | I can read and interpret information in tables including timetables. |
| I can use negative numbers in context and can count forwards and backwards with positive and negative numbers through 0. | I can subtract mentally using increasingly large numbers. | I can X numbers up to 4 digits by a one or 2 digit number. | I can round decimals with 2 decimal places to the nearest whole number and to one decimal place. | I can estimate the area of irregular shapes. | I can identify reflex angles. | I can complete information in tables including timetables. |
| I can count forwards or backwards in steps of powers of 10 for any given Number up to 1,000,000. | I can add mentally using increasingly large numbers. | I can establish whether a number up to 100 is prime and recall prime numbers up to 19. | I can recognise and use 1000ths and relate them to 10ths, 100ths and decimal equivalents. | I can calculate and compare the area of squares and rectangles. | I can identify angles at a point and one whole turn. | I can solve 'difference' problems using information presented in line graphs. |
| I can count forwards or backwards in steps of powers of 10 for any given Number up to 1,000,000. | I can subtract numbers with more than 4 digits using efficient written methods. | I can know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. | I can read and write decimal numbers as fractions. | I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. | I can identify angles at a point on a straight line and 1/2 a turn. | I can solve 'sum' problems using information presented in line graphs. |
| I know what each digit represents in numbers to 1,000,000. | I can add numbers with more than 4 digits using efficient written methods. | I can solve problems using multiplication and division. | I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. | I understand and use basic equivalences between metric and common imperial units. | I can identify multiples of 90 degrees. | I can solve 'comparison' problems using information presented in line graphs. |
| I can read, write, order and compare numbers to at least 1,000,000. | | I can identify multiples and factors, including finding all factor pairs. | I can + and - fractions with the same denominator and related fractions. | I can convert between different units of measure (e.g. Kilometre to metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre). | I can draw a given angle, writing its size in degrees. | |
| | | | I can recognise mixed numbers and improper fractions and convert from one form to another. | | I know angles are measured in degrees and can estimate and measure them. | |
| | | | I can compare and order fractions whose denominators are all multiples of the same number. | | I can identify 3-D shapes, including cubes and cuboids, from 2-D presentations. | |
| Number, place value & rounding | Addition and Subtraction | Multiplication and Division | Fractions and Decimals | Measures | Geometry | Data |

Mathematics Programmes of Study

6



| | | | | | |
|--|---|--|--|--|--|
| I can find pairs of numbers that satisfy numbers sentences involving two unknowns. | I use estimation to check answers to calculations. | I can solve ratio and proportion problems involving unequal sharing and grouping. | I can recall and use equivalences between simple fractions, decimals and percentages. | I can calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed and cubic metres. | I can draw and translate simple shapes and reflect them in the axes. |
| I can generate and describe linear number sequences. | I can solve problems involving any operation. | I can solve ratio and proportion problems involving the relative sizes of two quantities, including similarity. | I can solve problems involving the calculation of percentages of whole numbers or measures such as 15% of 360. | I recognise when it is necessary to use the formulae for area and volume of shapes. | I can describe positions on the full co-ordinate grid (all four quadrants). |
| I can use simple formulae expressed in words. | I can solve addition and subtraction multi-step problems. | I can divide proper fractions by whole numbers (e.g. $1/3 \div 2 = 1/6$). | I can solve problems which require answers to be rounded to specified degrees of accuracy. | I can calculate the area of parallelograms and triangles. | I can find unknown angles where they meet at a point, are on a straight line, and are vertically opposite. |
| I can express missing number problems algebraically. | I use knowledge of the order of operations to carry out calculations involving the four operations. | I can multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $1/4 \times 1/2 = 1/8$). | I can use written division methods in cases where the answer has up to 2 decimal places. | I can recognise that shapes with the same areas can have different perimeters and vice versa. | I can illustrate and parts of circles, including radius, diameter and circumference. |
| I can recognise years written in Roman numerals. | I can identify common factors, common multiples and prime numbers. | I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. | I can multiply one-digit numbers with up to 2 decimal places by whole numbers. | I can convert between miles and kilometres. | I can calculate and interpret the mean as an average. |
| I can read Roman numerals to 1000 (M). | I can calculate mentally, including with mixed operations and large numbers. | I can associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. $3/8$). | I can multiply and divide numbers by 10, 100 and 1000 where the answers are up to 3 decimal places. | I use, read, write and convert between standard units of measure. | I can construct line graphs. |
| I can solve number problems and practical problems. | I can interpret remainders as whole number remainders, fractions, or by rounding. | I can compare and order fractions, including fractions > 1 . | I can identify the value of each digit to three decimal places. | I can solve problems involving the calculation and conversion of units of measure, using decimal notation to 3 decimal places where appropriate. | I can construct pie charts. |
| I can calculate intervals across '0' when using negative numbers. | I can divide numbers up to 4 digits by a 2-digit whole number using an efficient written method. | I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination. | | | I can interpret pie charts. |
| I can use negative numbers in context. | I can multiply multi-digit numbers up to 4 digits by a 2 digit whole number using a written method. | | | | |
| I can round any whole number. | | | | | |
| I can read, write, order and compare numbers up to 10,000,000. | | | | | |

| | | | | | | |
|--------------------|---------------|--------------------------------|-------------------------------------|----------|----------|------|
| Number and Algebra | +, -, x and ÷ | Fractions Ratio and Proportion | Fractions, Decimals and Percentages | Measures | Geometry | Data |
|--------------------|---------------|--------------------------------|-------------------------------------|----------|----------|------|