

Key skills

End of year 1 - Expectations in Maths

Number and Place Value

- I can count up and down from 0 to 100 and more.
- I can count, read and write numbers up to 100.
- I can count in 2 or 5 or 10.
- When you show me a number, I can tell you what is one more and one less.
- I can find numbers on a number line when I am solving problems with questions using equal to, more than, less than, most and least.

Addition and Subtraction

- I read and write numbers from 1 to 20 in numbers and words.
- I know and can use the maths symbols +, - and = in a number sentence.
- I know my number bond facts to 20, such as $1+5=6$ and $5=6-1$.
- I add and subtract numbers up to 20, such as $5+5$ or $12-8$.
- I can solve some number problems such as $7 = ? - 9$.

Multiplication and Division

- I answer maths multiplication or division problems with help from an adult and using objects to see what the problem means.

Fractions

- I know that a half is one of two equal parts, and I find half of a shape or a set of objects by sharing the shape or set into two equal parts.
- I find a quarter of a shape or a set of objects by sharing the shape or set into four equal parts.

Measurement

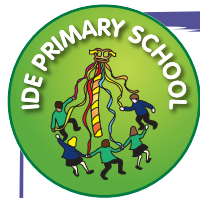
- I use words such as long/short, longer/shorter, tall/short, double/half to describe my maths work when I am measuring.
- When weighing, I use the words heavy/light, heavier than, lighter than to explain my work.
- When working with capacity, I use the words full/empty, more than, less than, half, half full and quarter to explain my work.
- I can answer questions about time, such as Who is quicker? or What is earlier?
- I can measure the length or height of something and write down what measure.
- I can measure how heavy an object is and write down what I find.
- I can measure the capacity of jugs of water and write down what I measure.
- I can measure how long something takes to happen, such as how long it takes me to run around the playground.
- I know that coins have different values, such as 2p, 5p, 10p and 50p.
- I use special time words such as before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.
- I can tell you the days of the week and months of the year and I can talk about weeks and months and years and what they mean.
- I can tell the time and draw hands on a clock for to the hour and half past the hour times.

Geometry - Properties of Shape

- I can name common 2D shapes such as rectangles, squares, circles and triangles.
- I can name some 3D shapes such as cuboids and cubes, pyramids and spheres.

Geometry - Position

- I can describe my position, direction and movement, including whole turns, half turns, quarter turns and three-quarter turns.



Key skills

End of year 2 - Expectations in Maths

Number and Place Value

- I can count forward and backward in steps of 2, 3, and 5 from 0, and make jumps in tens from any number.
- I know what each digit means in Tens and Unit numbers such as 24.
- I can find and show numbers on a number line.
- I can order numbers up to 100 and tell you which numbers are bigger or smaller.
- I use the greater than, less than and equals signs in maths and know what they mean.
- I can read and write numbers to 100 in digits and words.
- I solve problems using number facts such as $18+2=20$ and what I know about the value of digits in a number.

Addition and Subtraction

- I answer addition and subtraction maths problems using objects to help me work it out.
- I can solve addition and subtraction problems and work out how I answer it on paper or show you how I did it in my head by explaining step by step.
- I answer problems with addition and subtraction using my number facts to 20 and other number facts up to 100.
- I can add and subtract numbers such as $34 - 8$ or $52 + 5$ using objects or pictures to help.
- I add and subtract two-digit numbers using objects to help me.
- I can add or subtract numbers such as $42 - 22$ or $56 + 29$ using objects or pictures to help me.
- I can add or subtract three numbers such as $2 + 5 + 9$.
- I know that adding to numbers together can be done in any order but subtracting numbers can only be done in one order.
- I can check my answers or solve missing number problems by doing an inverse check.

Multiplication and Division

- I know my 2 and 5 and 10 times tables by heart and can tell whether a number is odd or even.
- I use multiplication ($\times$), division ($\div$) and equals ($=$) signs when writing out my times tables.
- I know that the multiplication of two numbers can be done in any order, but that the division of numbers can only be done in one order.
- I can solve multiplication and division problems using times table facts and objects or pictures to help me.

Fractions

- I can find $\frac{1}{3}$ or $\frac{1}{4}$ or $\frac{2}{4}$ or $\frac{3}{4}$ of a shape, length or set of objects.
- I can write simple fractions sentences such as $\frac{1}{2}$ of $6 = 3$ and know that $\frac{2}{4}$ equals $\frac{1}{2}$.

Measurement

- I can choose, use and measure the correct unit to measure length or height in any direction (m/cm); weight (kg/g); temperature ($^{\circ}\text{C}$); or capacity (litres/ml).
- I can compare and order lengths, weight and capacity and then record the results using symbols for greater than, less than and equals.
- I know and use the symbols for pounds (£) and pence (p) and can add together different amounts of money, such as 253p and £2.
- I can find different combinations of coins that equal the same amounts of money.
- I have solved money problems such as how much change do I get from 50p if I buy an apple for 35p?
- I can put the time of events in order.
- I can 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 Shape

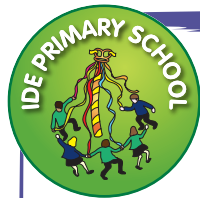
- I can describe the properties of some 2-D shapes, including the number of sides they have and facts about their symmetry.
- I can describe the properties of some 3-D shapes, including the number of edges, faces and vertices they have.
- I can tell you which 2-D shapes appear as the faces on 3-D shapes, such as triangles on a pyramid.
- I can compare 2-D and 3-D shapes with everyday objects around me.

Geometry - Position

- I can order combinations of mathematical objects in patterns and sequences.
- I can describe my position, direction and movement, including describing turns as quarter, half and three-quarter turns in clockwise and anti-clockwise directions.

Statistics

- I can read and construct picture graphs, tally charts and tables.
- I can sort objects into categories and tell you how many objects are in each category and show which category has the most.
- I work on sorting objects and can answer questions about the groups of objects I have sorted.



Key skills

End of year 3 - Expectations in Maths

Number and Place Value

- I can count from 0 in steps of 4, 8, 50 and 100.
- I can find 10 or 100 more or less than a given number.
- I know what each digit means in Hundred Tens and Unit numbers such as 204.
- I can compare and order numbers up to 1000.
- I can identify and estimate numbers in different units such as length (mm and m) and weight (g and kg).
- I read and write numbers up to 1000 in numerals and in words.
- I can solve number problems, working with numbers up to 1000 and in different units of measurement.

Addition and Subtraction

- I can add and subtract numbers in my head, including questions such as $432 - 7$.
- I can add and subtract numbers in my head, including questions such as $432 - 70$.
- I can add and subtract numbers in my head, including questions such as $432 - 300$.
- I can use written methods to add or subtract two three-digit numbers.
- I can estimate the answer to a question before I work it out and then use inverse operations to check the answer when I have finished.
- I solve problems such as missing numbers (for example, $452 - ? = 122$) using my knowledge of number facts and methods of addition and subtraction.

Multiplication and Division

- I know my 3, 4 and 8 times tables.
- I can answer multiplication and division questions such as 16×5 or 45 divided by 9.
- I can solve more complex problems and missing number questions involving multiplication and division.

Fractions

- I can count up and down in tenths.
- I know that tenths can be found by dividing an object or shape into ten equal parts or by dividing numbers by 10.
- I can find a fraction (such as $\frac{2}{5}$ or $\frac{3}{4}$) of a set of objects.
- I know how to find fractions of a number or shape - such as $\frac{3}{5}$, $\frac{1}{4}$ or $\frac{4}{6}$.
- I can show that some fractions have the same value - such as $\frac{1}{2}$, $\frac{3}{6}$ and $\frac{5}{10}$ or $\frac{1}{3}$ and $\frac{3}{9}$.
- I can add and subtract fractions with the same denominator (for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$).
- I can compare and order unit fractions, and fractions with the same denominators.
- I solve problems that finding, ordering or comparing fractions.

Measurement

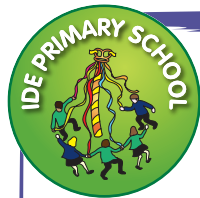
- I can measure and compare in these units: lengths (m/cm/mm), weight (kg/g) and capacity (l/ml).
- I can measure the perimeter of a 2-D shape such as a square or triangle.
- I can work on money problems, adding and subtracting amounts of money and working out how much change is left. I use both £ and p in my problems.
- I can tell and write the time from a clock with numbers or Roman numerals or using 12 and 24 hour clocks.
- I can tell the time accurately to the nearest minute.
- I can measure and record time passing in seconds, minutes and hours.
- I know and use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight in my maths work.
- I know the number of seconds in a minute and the number of days in each month, year and leap year.
- I can calculate how long an event or task took to complete.

Shape

- I draw 2-D shapes and make 3-D shapes using modelling materials.
- I recognise and can describe 3-D shapes even when they have been turned about in different ways.
- I know an angle is used to measure how far something turns. An angle is also the point in a 2-D shape.
- I know what a right angles is and I know that two right angles make a half-turn, three make three quarters of a turn and four right angles make a complete turn.
- I can tell whether an angle is greater than or less than a right angle.
- I know when a line is horizontal or vertical or when two lines are perpendicular or parallel.

Statistics

- I can answer questions about bar charts, pictograms and tables and make my own bar charts, pictograms and tables.
- I can answer maths problems such as 'How many more?' and 'How many fewer?' by finding the information in bar charts, pictograms and tables.



Key skills

End of year 4 - Expectations in Maths

Number and Place Value

- I can count in multiples of 6, 7, 9, 25 and 1000.
- I can find 1000 more or less than a given number.
- I can count backwards to negative numbers below zero.
- I know what each digit means in Thousands, Hundreds Tens and Unit numbers such as 2024.
- I can order and compare numbers above 1000.
- I can make estimates of a range of things - such as how many small objects there are in a large jar, how long in cm an object is, how heavy an object may weigh in kg.
- I can round a number to the nearest 10, 100 or 1000.
- I can solve number and practical problems that involve rounding, ordering and exploring negative numbers and with increasingly large positive numbers.
- I can 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.

Addition and Subtraction

- I can add and subtract numbers with up to 4 digits using written methods (for example, using column addition and subtraction).
- I can estimate an answer and check my answer using inverse operations.
- I can solve longer addition and subtraction problems and explain all the steps I took and why I worked things out as I did.

Multiplication and Division

- I know all my times table up to the 12 times tables.
- I know what the outcome is when I multiply a number by 1 or by zero.
- I know what the outcome is when I divide a number by 1.
- I can multiply three numbers together, such as $3 \times 6 \times 9$.
- I know what factor pairs are how I can multiply numbers in any order and use my knowledge to work out questions in my head.
- I can multiply a two-digit or a three-digit number by a one-digit number using written methods.
- I can solve maths problems such as - how many different outfits can I make from 3 hats and 4 coats.

Fractions

- I can show in drawings why a number of fractions equal each other (such as $\frac{3}{5}$ and $\frac{6}{10}$) and are called equivalent fractions.
- I can count up and down in hundredths and know that a hundredth is made by dividing an object by one hundred and a tenth is made by dividing an object by ten.
- I can work out the fractions of numbers such as $\frac{4}{5}$ of 25 or $\frac{7}{10}$ of 700.
- I can add and subtract fractions with the same denominator.

- I can tell you the decimal equivalents of any number of tenths or hundredths - such as $\frac{1}{10} = 0.1$ and $\frac{23}{100} = 0.23$.
- I know what the decimal equivalents are for $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.
- I can divide a one- or two-digit number by 10 and 100 and I know what the tenths and hundredths mean after the decimal point.
- I can round decimals with one decimal place to the nearest whole number.
- I can compare numbers such as 0.26 and 0.56 to say which is bigger or lower.
- I can solve measure and money problems involving fractions and decimals to two decimal places.

Measurement

- I can convert one unit of measurement to another, such as kilometre to metre, hour to minute and cm to mm.
- I can measure and calculate the perimeter of a rectangle (including a square).
- I can find the area of a rectangular shape by counting the number of squares the shape takes up.
- I can estimate and compare the measurements of a range of measures (such as cm, km, g, litres) and money.
- I can read, write and convert time between clocks with hands (analogue clocks) and digital 12 and 24-hour clocks.
- I can convert hours to minutes, minutes to seconds, years to months and weeks to days.

Geometry - Properties of Shape

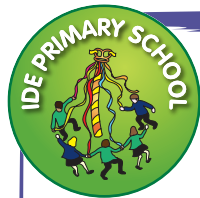
- I can group 2-D shapes based on their properties (such as the number of sides) and sizes.
- I can find acute and obtuse angles and order a set of given angles by size.
- I can find all the lines of symmetry in 2-D shapes.
- If I have been given one half of a symmetrical shape, I can complete the other half based on the position of the line of symmetry.

Geometry - Position and Direction

- I can find the coordinates of a point on a grid.
- I can move (translate) a point on a grid by a given set of jumps either up/down or left/right.
- I can plot points using coordinates and join up the points to create a shape.

Statistics

- I can take continuous and discrete data and create a bar chart or time graph.
- I can solve comparison, sum and difference problems using information in bar charts, pictograms, tables and other graphs.



Key skills

End of year 5 - Expectations in Maths

Number and Place Value

- I can read, write, order and compare numbers to at least 1 000 000 and know the value of each digit.
- I count forwards or backwards in steps 10, 100, 1000, 10000 or 100000 for any given number up to 1000000.
- I can use negative numbers in my work and can count backwards and forwards to and from negative numbers.
- I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.
- I can solve number problems and practical problems that involve numbers up to 1000000, negative numbers, rounding or jumping in steps.
- I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Addition and Subtraction

- I can add and subtract whole numbers with more than 4 digits using written methods such as column addition and subtraction.
- I can add and subtract larger numbers in my head.
- I round numbers to check the accuracy of my solution.
- I can solve addition and subtraction multi-step problems, deciding which operations and methods to use and why.

Multiplication and Division

- I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
- I know whether a number up to 100 is prime and recall prime numbers up to 19.
- I can multiply 4 digit numbers by a one - or two - digit number using a written method, including long multiplication for two-digit numbers.
- I multiply and divide numbers mentally drawing upon my times table knowledge and other number facts.
- I can divide 4 digit numbers by a one-digit number using the written method of short division and find the remainder.
- I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- I know what square numbers and cube numbers are, including the notation for squared (2^2) and cubed (3^3).
- I can solve multiplication and division problems using my knowledge of factors and multiples, squares and cubes.
- I can solve more difficult problems involving addition, subtraction, multiplication and division and a combination of these.
- I can solve problems including scaling by simple fractions and problems involving simple rates.

Fractions

- I can compare and order fractions whose denominators are all multiples of the same number.
- I can name and write equivalent fractions of a given fraction, and show these in a drawing (including tenths and hundredths).
- I know what mixed numbers and improper fractions are and I can convert from one to the other (for example, $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$).
- I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- I use diagrams and some fraction tools to multiply proper fractions ($7/10$) and mixed numbers ($1 \frac{7}{10}$) by whole numbers.

- I can read and write decimal numbers as fractions (for example, $0.71 = 71/100$).
- I know what thousandths are and how to use them with tenths, hundredths and decimals.
- I can round decimals with two decimal places to the nearest whole number and to one decimal place.
- I can read, write, order and compare numbers with up to three decimal places.
- I can solve problems involving numbers with up to three decimal places.
- I know what the per cent symbol is (%) 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.
- I work on 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).
- I can change metric units to become imperial units such as inches, pounds and pints.
- I can calculate the perimeter of multi-shape shapes in centimetres and metres.
- I can calculate the area of rectangles in square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes.
- I can estimate volume [for example, using 1 cm^3 blocks to build cuboids] and capacity [for example, using water].
- I can convert between the units of time.
- I can solve more difficult problems which involve units of measurement, decimal numbers and scales.

Geometry - Properties of Shape

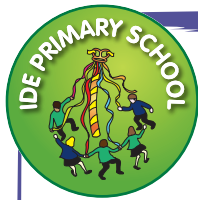
- I can identify 3-D shapes, including cubes and other cuboids, from 2-D drawings.
- I know that angles are measured in degrees and I can estimate and compare acute, obtuse and reflex angles.
- I can draw a given angle (such as 47°), and then measure them in degrees ($^\circ$).
- I know one whole turn - or a set of angles all around a point - measure a total of 360° .
- I know that a straight line - or angles that add up to a straight line - measure 180° .
- I can identify multiples of 90° (right angles).
- I can find the missing lengths and angles of a rectangle.
- I know regular shapes have equal sides and angles and irregular shapes do not have equal sides and angles.

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

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



Key skills

End of year 6 - Expectations in Maths

Number and Place Value

- I can work with numbers up to 10 000 000 and know what each digit represents.
- I can round a whole number as requested - for example to the nearest 10 or 1000 or 100000.
- I understand and use negative numbers in my work, for example - working out how much is between -7 and +8.
- I can solve number and practical problems that involve large numbers, rounding and negative numbers.

Multiplication and Division

- I can multiply 4 digit numbers by a two-digit number (for example 4307×34) using the written method of long multiplication.
- I can divide 4 digit numbers by a two-digit number using the written method of long division - and tell you the remainder.
- I can choose to divide 4 digit numbers by a two-digit number using the written method of short division if this is possible.
- I can multiply, divide, add and subtract large numbers in my head.
- I identify common factors, common multiples and prime numbers.
- I know that addition, subtraction, multiplication and division should be carried out in a specific order when looking at problems.
- I can solve addition and subtraction multi-step problems, deciding where to add or subtract.
- I can solve problems involving addition, subtraction, multiplication and division.
- I always estimate my answer before I begin calculating - this helps me to check at the end to make sure I am correct.

Fractions, Decimals and Percentages

- I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.
- I can compare and order fractions, including fractions greater than 1.
- I add and subtract fractions with different denominators and mixed numbers.
- I can multiply fractions such as $1/4 \times 1/2 = 1/8$.
- I know how to divide proper fractions by whole numbers (for example, $1/3 \div 2 = 1/6$).
- I can change a fraction into a decimal - for example, I can change $3/8$ to 0.375 by dividing 1 by 8 and multiplying by 3.
- I can multiply and divide numbers by 10, 100 and 1000 and know what each digit means up to three decimal places.
- I can multiply numbers such as 1.45 by a one digit number - for example 1.45×7 .
- I use written division methods in cases where the answer has up to two decimal places.
- I can solve problems which include rounding to a required accuracy such as the nearest 10, 100 or 10000.
- I know the decimal value, percentage and fraction of a range of values - such as 0.5, 50 per cent and $1/2$.

Ratio and Proportion

- I can solve problems about relative sizes (ratio).
- I can find the percentage of an amount - such as finding 15 per cent of 360.
- I can solve similar shape problems.
- I can solve problems about unequal sharing - such as 'I need four eggs and for every egg I need three spoonfuls of flour. How much flour do I need?'.

Algebra

- I know how to use simple formulae such as $n - 10 = 2$.
- I can create a sequence of numbers that follow a rule.
- I can use a letter (such as n or x) to show a missing number - such as $10 - x = 5$.
- I can find pairs of numbers that satisfy an equation with two unknowns.
- I can list possible answers to missing numbers such as listing the possible answers of a and b in $a + 6 = b - 10$.

Measurement

- I solve problems about different units of measures with three decimal places.
- I can convert measurements of length, weight, volume and time up to three decimal places in length (for example $0.345\text{kg} = 345\text{g}$).
- I can convert between miles and kilometres.
- I know that even though shapes may have the same area, the perimeter may be different - or a shapes with the same perimeter may have a different areas.
- I can use a formulae for area and volume of shapes.
- I can calculate the area of parallelograms and triangles.
- I can work with the volume of cubes and cuboids using cubic centimetres (cm^3) and cubic metres (m^3), and other units too such as mm^3 and km^3 .

Geometry - Properties of Shape

- I accurately draw 2-D shapes using given dimensions and angles.
- I can recognise, describe and build 3-D shapes, including making nets.
- I can classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.
- I know the parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
- I can work with 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 use the four quadrants in a coordinate grid.
- I can draw and translate shapes using coordinates or reflect a shape on the grid.

Statistics

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