

Parents' Guide to Maths.

'Must do' by the end of Year 1

Number

- Be able to count on in 2s, 5s and 10s to 100
- Know one more and one less than any numbers to 100
- Know all odd and even numbers to 100
- Find missing numbers in sequence up to 20
- Add 2, one-digit numbers to 20
- Add 3, one-digit numbers to 20
- Know all number bonds for numbers to 20, e.g. $2+4$, $5+6$, $17+3$, etc.

Shape and Measures

- Name the following shapes:



- Tell time to the hour and half past the hour
- Recognise the £1, 50p, 20p, 10p, 5p, 2p and 1p coins
- Name the days of the week
- Name the months of the year

Parent Tip

Do fun maths activities at home, such as: counting money, weighing, filling containers, making number bonds with buttons etc.

Parents' Guide

'Must do' by the end of Year 2

- Count on in 2s, 3s, 5s and 10s to 100
- Find 10 more than a given number to 100
- Find 10 less than a given number to 100
- Use the $<$ $>$ and $=$ signs correctly
- Order a set of 3 numbers in increasing and decreasing value
- Know all addition bonds to 20
- Know all subtraction bonds to 20
- Add a 1-digit number to a 2-digit number to 100
- Add 2, 2-digit numbers using column addition
- Subtract a 1-digit number from a 2-digit number using columns with no carry over
- Rapid recall of 2-digit number add a 1-digit number
- Rapid recall of a 2-digit number add 10
- Rapid recall of 2-digit add 2-digit number
- Rapid recall of 2-digit number take away 1-digit number
- Rapid recall of a 2-digit number take away 10
- Know all odd and even numbers to 100
- Write any written number as digits
- Problem solving involving take away or difference
- Know the 2x, 5x and 10x tables
- Know the fractions: $\frac{1}{2}$; $\frac{1}{4}$; $\frac{3}{4}$; $\frac{1}{3}$; $\frac{2}{3}$
- Tell time to 5 minute intervals
- Recognise all coins from 1p to £2
- Add and subtract money values involving 10p, 50p, and £notes

Parent Tip

Do fun maths activities at home, such as: counting money, weighing, filling containers, making number bonds with buttons or sweets, jumping to times tables etc.

Parents' Guide.

'Must Dos' by the end of Year 3

- Write down all numbers said to them up to 1000
- Know place value of each digit in a 3-digit number
- Order a set of 3-digit numbers: greatest first, smallest first
- Count on and back from any number in 2s, 3s, 4s, 5s, 8s, 10s, 50s, and 100s up to 1000
- Know 100 more than a given number to 1000
- Know 100 less than a given number to 1000
- Add 2 or 3 numbers with 3-digits, using column addition
- Subtract 2 numbers with 3-digits using column subtraction
- Rapid recall: Add rapidly a 3-digit number to a 1-digit number; to a 10s number; and to a 100s number
- Subtract rapidly a 1-digit number from a 3-digit number; a 10s number and a 100s number
- Rapid Recall: 2x, 3x, 4x, 5x, 8x, 10s tables and their inverses
- Multiply a 2-digit number by a 1-digit number
- Divide 2, 3, 4, 5, 8 and 10 into a 2-digit number (no remainder)
- Fractions: Find $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}$ of a 2-digit number
- Order fractions from $\frac{1}{2}$ to $\frac{1}{12}$
- Know pairs of fractions that make up 1 whole
- Know equivalent fractions of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}$ and $\frac{1}{10}$
- Add 2 fractions with same denominator
- Subtract 1 fraction from another with same denominator

Parent Tip

Please help your child to learn their times tables, division facts and number bonds by heart as these help to secure mental and written methods for calculating across the whole of maths.

There are numerous fun games and websites on line to help with this such as: Moonmaths-
www.primaryresources.co.uk/online/moonmaths.swf or www.kidsnumbers.com

Parents' Guide

'Must Dos' by the end of Year 4

Number

- Read and write all numbers to 10,000
- Know place value of each digit in a 4-digit number
- Order a set of 4-digit numbers: greatest first, smallest first
- Count on and back from any number in 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s, 25s, 50s, 100s and 1000s up to 10,000
- Round a number to the nearest 10 or 100
- Read and write negative numbers
- Count on and back in negative numbers
- Add a number of 4-digit numbers using formal methods
- Subtract 2, 4-digit numbers using formal methods
- Estimate the answer to additions with up to 3-digit numbers
- Estimate the answer to subtractions with up to 3-digit numbers

Number

- Rapid Recall: All table facts up to 12x, including their inverses
- Multiply 2-digit and 3-digit numbers by a 1-digit number
- Divide 2-digit numbers by a 1-digit number
- Recognise and use factor pairs within 144
- Fractions: Identify and name equivalent fractions with the same denominator up to and including 12
- Add and subtract fractions with the same denominator (within 1 whole)
- Decimal Fractions: Order decimal fractions up to tenths and hundredths
- Multiply and divide decimal fractions by 10 and 100
- Recognise fractional value of decimal fractions

Parent Tip Please help your child to learn their times tables, division facts and number bonds by heart as these help to secure mental and written methods for calculating across the whole of maths.

There are numerous fun games and websites on line to help with this such as:
Moonmaths- www.primaryresources.co.uk/online/moonmaths.swf or
www.kidsnumbers.com

Parents' Guide 'Must Dos' by the end of Year 5

Number

- Read, write and order numbers to 1,000,000
- Count on and back in steps of 100, 1,000, 10,000 up to 1,000,000
- Round any number to the nearest 10, 100, 1,000, 10,000 or 100,000
- Estimate and calculate additions involving 2, 3-digit numbers (to nearest 10)
- Estimate and calculate subtractions involving 2, 3-digit numbers (to nearest 10)
- Estimate and calculate multiplications involving a 2-digit and a 3-digit numbers (to nearest 10)
- Estimate and calculate divisions of a 3-digit number by a 1-digit number (to nearest 10)
- Add 3, 5-digit numbers using column addition

Shape and measures

- Measure angles in degrees
- Draw a given angle accurately
- Know and use reflex angles
- Construct shapes from given dimensions
- Identify 3D shapes from 2D representations
- Identify, describe and represent the position of a shape following reflection and translation

- Subtract one 5-digit number from another, using column subtraction
- **Rapid Recall:** Mentally add a 2-digit number to a 3-digit number
- **Rapid Recall:** Mentally add a 1000s number to a 5-digit number
- **Rapid Recall:** Mentally subtract a 2-digit number from a 3 or 4-digit number
- **Rapid Recall:** Mentally subtract a 1000s number from a 5-digit number
- Know all factors that make up numbers to 100
- Recognise all prime numbers to 100
- Multiply a 4-digit number by a 2-digit number using formal methods
- Divide a 4-digit number by a 1-digit number (with remainders)
- Multiply numbers by 10, 100 and 1,000

Shape and Measures

- Add, subtract, multiply and divide units of measure (using decimal notation)
- Understand and use basic equivalence between metric and common imperial units
- Calculate, estimate and compare areas of squares and rectangles using cm squared (cm^2) and metre squared (m^2)
- Recognise volume in practical contexts

Number

- Divide number by 10, 100 and 1,000
- Recognise and use square numbers and square roots
- Know and use the symbols $(^2)$, $(^3)$ and $(\sqrt{\quad})$ accurately
- Fractions: Compare and order fractions whose denominators are multiples of the same number
- Convert mixed numbers to improper fractions and visa versa
- Add and subtract fractions with the same denominator
- Multiple proper fractions and mixed fractions by whole numbers

Number

- Decimal Fractions: Read and write decimal numbers as fractions (up to hundredths)
- Round decimals with two decimal places to nearest whole number and one decimal place
- Read, write, order and compare decimal numbers with up to three decimal places
- Percentages: Recognise the % symbol
- Understand that percentage is measured as part of 100
- Solve problems which require knowing percentage and decimal value of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{2}{3}$ and $\frac{1}{3}$

Parent Tip

Please help your child to learn their times tables, division facts and number bonds by heart as these help to secure mental and written methods for calculating across the whole of maths. There are numerous fun games and websites on line to help with this such as: Moonmaths- www.primaryresources.co.uk/online/moonmaths.swf or www.kidsnumbers.com

Parents' Guide. 'Must Dos' by the end of Year 6

Number

- Read, write and order numbers to 10,000,000
- Round any number to any degree of accuracy
- Add and subtract negative numbers
- Multiply a 4-digit number by a 2-digit number
- Divide a 4-digit number by a 2-digit number, expressing remainder as a fraction, decimal fraction or by rounding to whole numbers
- Mental Agility: Calculations involving large numbers
- Mental Agility: Calculations involving two operations
- Use estimation to check answers
- Carry out problem solving calculations involving all 4 operations
- Add and subtract mixed numbers with fractions of different denominations

Number

- Fractions: Multiply simple fractions, writing answers in their simplest forms
- Divide proper fractions by whole numbers
- Identify value of each digit in a 3 decimal place number
- Multiply decimal fraction with 3 decimal places by 10, 100 and 1000
- Multiply and divide a number with 2 decimal places by 1-digit and 2-digit numbers
- Percentages: Use percentages for comparisons
- Calculate percentage of whole numbers
- Recall and use equivalences between fractions, decimal fractions and percentages
- Ratio: Use ratio to show relative sizes of 2 quantities
- Algebra: Solve linear missing numbers
- Continue a linear number sequence involving positive and negative numbers

Shape and Measures

- Compare and classify geometrical shapes based on properties and size
- Find unknown angles in a triangle, quadrilateral and regular polygon
- Illustrate and name parts of a circle, including radius, diameter and circumference
- Recognise, describe and build 3D shapes
- Create a cuboid from a net
- Describe properties of 3D shapes and identify parallel planes and symmetry
- Estimate size of angles
- Describe position on the full coordinate grid
- Draw, translate and reflect shapes
- Read, write and convert between standard units

Shape and Measures

- Calculate area of parallelograms and triangles
- Data: Draw, read and interpret graphs
- Use and interpret mean as an average

Parent Tip

Please help your child to learn their times tables, division facts and number bonds by heart as these help to secure mental and written methods for calculating across the whole of maths.

There are numerous fun games and websites on line to help with this such as: Moonmaths- www.primaryresources.co.uk/online/moonmaths.swf or www.kidsnumbers.com