



Flowerly Field Primary School

National Curriculum 2014

Mathematics

'Must Do' Parents' Guides for Y1 to Y6

(Adapted from 'Focus on Mathematics')

Parents' Guide '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

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: $\frac{1}{2}$; $\frac{1}{4}$; $\frac{3}{4}$; $\frac{8}{8}$
- ✓ Tell time to 5 minute intervals
- ✓ Recognise all coins from 1p to £2
- ✓ Add and subtract money values involving 10p, 50p, and £notes



'Must do' 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 $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$ 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 $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$ and $\frac{1}{10}$
- ✓ Add 2 fractions with same denominator
- ✓ Subtract 1 fraction from another with same denominator



Parents' Guide

'Must do' 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

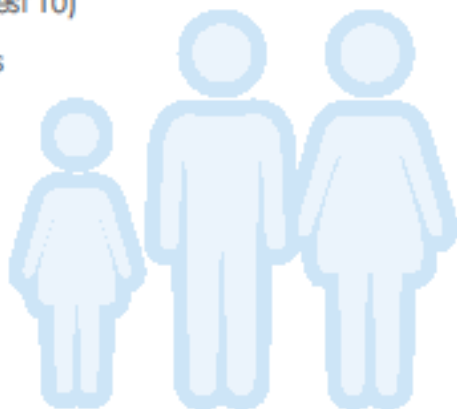
- ✓ Rapid Recall: All table facts up to 12x, including their inverses
- ✓ Multiply 2-digit and 3-digit numbers by a 1-digit number
- ✓ Divide 2-digit numbers by a 1-digit number
- ✓ Recognise and use factor pairs within 144
- ✓ Fractions: Identify and name equivalent fractions with the same denominator 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

Parents' Guide

'Must do' 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
- ✓ 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



Parents' Guide

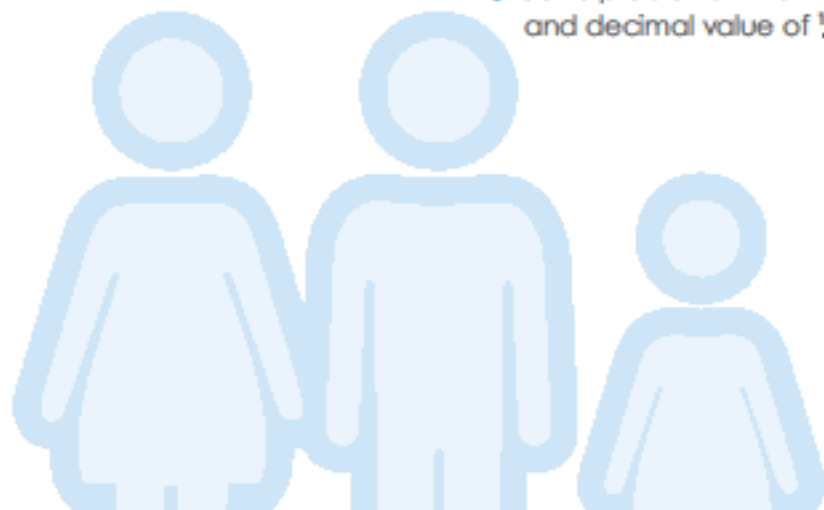
'Must do' by the end of Year 5

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

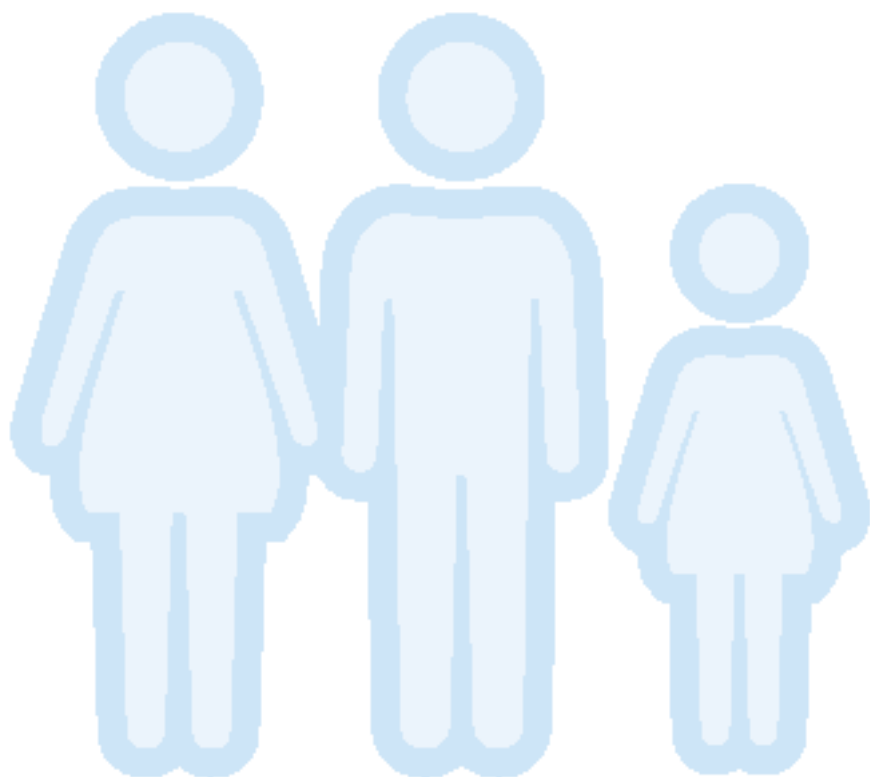
Number

- ✓ 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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{2}{4}$ and $\frac{1}{8}$



Parents' Guide

'Must do' by the end of Year 5



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
- ✓ 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

Parents' Guide

'Must do' 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

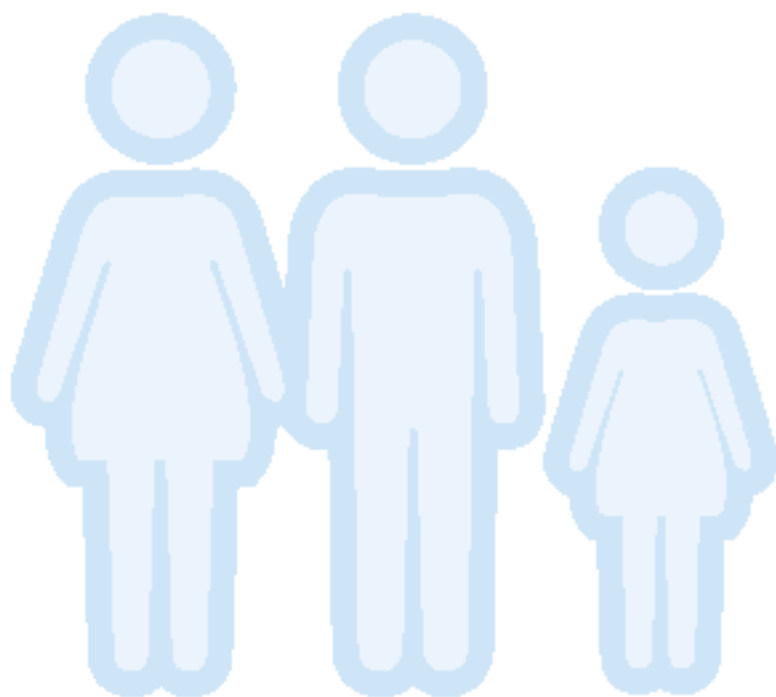
Number

- ✓ 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



Parents' Guide

'Must do' by the end of Year 6



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