Thank you for attending!

Please use these QR codes to access some useful websites.

BBC Bitesize Maths

Scan for Mathletics

KFI STEM Page

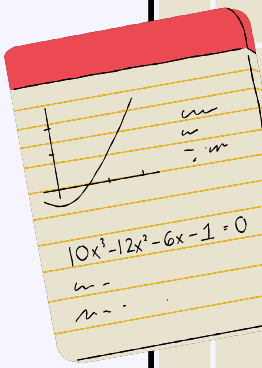
Topmarks Maths

ictgames Maths

Kings Furlong Infant School & Nursery

Member of the South Farnham Educational Trust

Maths at Kings Furlong Infant School and Nursery



SFET South Farnham Educational Trust

Aims of Mathematics at Kings Furlong Infants

Number

Our curriculum ensures that all children:

- Become fluent in the fundamentals of mathematics in order to develop conceptual understanding and the ability to recall and apply their knowledge rapidly and accurately.
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- Can solve problems by applying their mathematics to a variety of routine and non-routine problems.

Maths Outside

Games

Snakes and Ladders

Dice Games

Find numbers in newspapers and magazines

Bingo

Guess my shape

How long does it take to....?

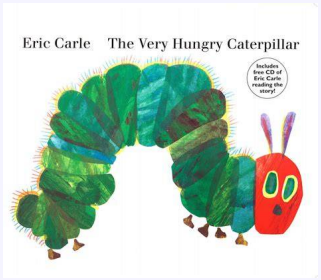
Number of the week

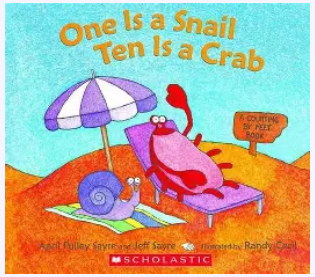
Shape of the week

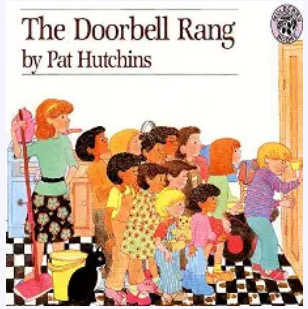
Hopscotch and Skittles

Count, count, count!

Books







EYFS Framework: Maths

How can you help at home?

- Be positive about maths
- Engage in everyday maths - discuss maths wherever possible
- Play games involving maths
- Make mistakes
- Learn together - we are all learners
- Let your children win
- Celebrate effort and strategies
- Understand that there is more than one way
- Don't expect them to get it the first time or in a different context
- Show the same concepts in different contexts

Everyday Maths

Follow a recipe - a great opportunity for maths talk, estimation, weight, time, halving or doubling quantities

Create a daily/weekly timetable - use pictures alongside analogue/digital clocks and words to match. A great opportunity to understand time passing and interval of time throughout a day

Shopping - An important opportunity to handle coins and notes, discuss the value, add amounts together, subitise amounts, subtract to find change, halve and quarter amounts

Discuss the weather forecast - create charts across a set amount of time, read numbers on thermometers, discuss whether the temperature is higher or lower than the previous day.

Number

• Have a deep understanding of numbers to 10, including the composition of each number.

• Subitise (recognise quantities without counting) up to 5.

• Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical Patterns

• Verbally count beyond 20, recognising the pattern of the counting system.

• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.

• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Year 1

Number and Place Value

- 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; count in multiples of 2s, 5s and 10s
- given a number, identify 1 more and 1 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

Addition and Subtraction

- 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 0
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9

Multiplication and Division

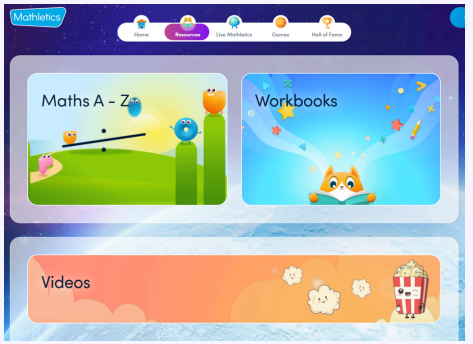
- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

Fractions

- recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity

recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity

use the Maths A-Z to search different mathematical terms and will be provided with written and visual definitions, download workbooks if they wish to complete them and watch videos that explain different concepts;



play games by earning enough points by doing their homework;

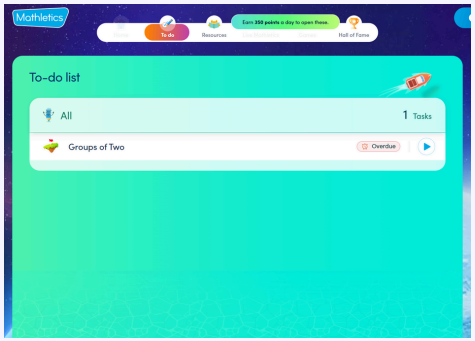
and finally earn certificates (half-termly) when they reach the next stage and a trophy for the class with the most points (weekly).

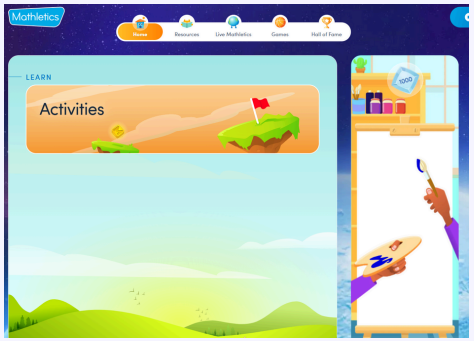
Mathletics

In Year 1 and Year 2, Mathematics homework is delivered through the website Mathletics.

Scan for Mathletics

Your child should have their own unique username and password. Their account can also be accessed through their own QR code too. Once your child has logged in there will be a to do list with this week's homework (left). Once the to do list has been completed the rest of Mathletics is then unlocked and your child can: complete any other activity if they wish (right);





National Curriculum

Geometry - Shapes

- 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]

Geometry - Position and Direction

- describe position, direction and movement, including whole, half, quarter and three-quarter turns

Measurement

- 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]
- 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

Year 2

Number and Place Value

- count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward
- recognise the place value of each digit in a two-digit number (10s, 1s)
- identify, represent and estimate numbers using different representations, including the number line
- 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

Addition and Subtraction

- solve problems with addition and subtraction:
  - using concrete objects and pictorial representations, including those involving numbers, quantities and measures
  - applying their 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 1s
  - a two-digit number and 10s
  - 2 two-digit numbers
  - adding 3 one-digit numbers
- show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 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

Multiplication and Division

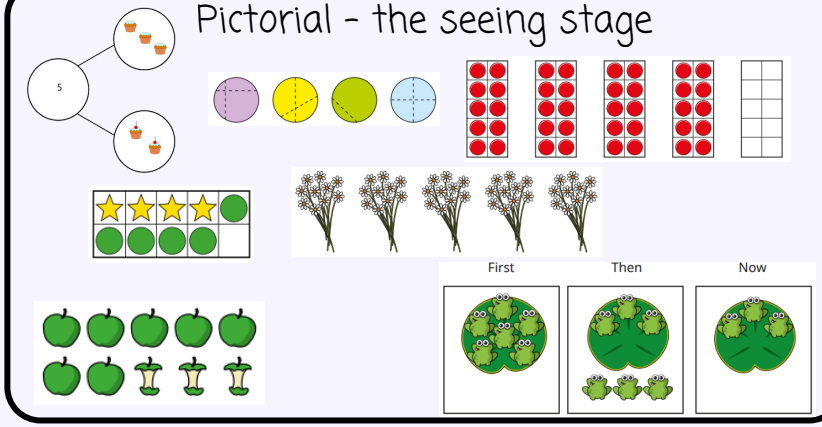
- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
- show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 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

Fractions

- recognise, find, name and write fractions ½, ⅓ and ¼ of a length, shape, set of objects or quantity
- write simple fractions, for example of 6 = 3 and recognise the equivalence of ½ and 2/4

Concrete - the doing stage

Pictorial - the seeing stage



Abstract - the symbolic stage

6 + 4 = 10
4 + 6 = 10
10 = 4 + 6
7 + ___ = 10

½ of 8 = 4
¼ of 8 = 2

CPA Approach

The concrete pictorial abstract (CPA) approach is a widely used method to teach mathematics that begins with real-world objects and ends with abstract concepts. By starting with concrete objects and gradually moving towards abstract concepts, students develop a strong understanding of the underlying concepts of mathematics. This helps to build a solid foundation for future learning and problem-solving.

C - Concrete - The 'doing' stage of the CPA learning approach.

P - Pictorial - The 'seeing' stage of the CPA learning approach.

A - Abstract - The 'symbolic' stage of the CPA learning approach.

National Curriculum

Geometry - Shapes

- identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line
- 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

- 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 anti-clockwise)

Measurement

- 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 =
- 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