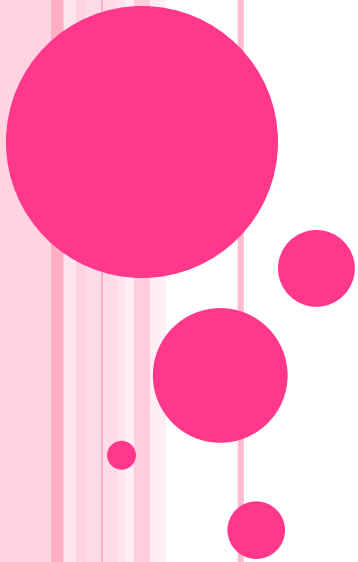


# Maths in KS1



# Problem Solving

## 5 things before the lights go out:

- 100 square
- Washing line
- Memory tray
- Clock
- Counting stick



# Number and Place Value

## In Yr1 children will learn to:

- count to and across 100, forwards and backwards, beginning with any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one 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.



# Number and Place Value

## In Yr2 children will learn to:

- count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward
- recognise the place value of any digit in a 2-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 to 100; use the  $<$ ,  $>$  and  $=$  signs
- read and write numbers to at least 100 in numerals and words use place value and number facts to solve problems



# Addition and Subtraction

## In Yr1 children will learn to:

- read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20 <http://www.topmarks.co.uk/maths-games/hit-the-button>
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as  $7 = - 9$ .



# Addition and Subtraction

## In Yr2 children will learn to:

- 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
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers and adding three one-digit numbers



# Strategies

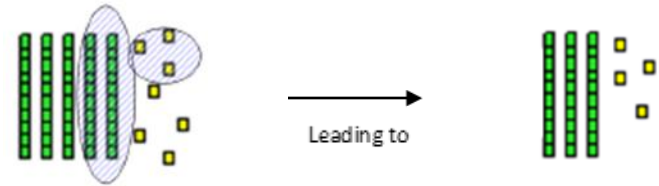
## Addition



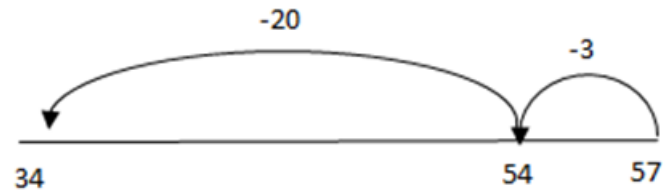
$$34 + 23 = 57$$



## Subtraction



$$57 - 23 = 34$$



# Addition and Subtraction

## In Yr2 children will learn to:

- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100  
<http://www.topmarks.co.uk/maths-games/hit-the-button>
- show that addition of two numbers can be done in any order (commutative) and subtraction of one 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

## In Yr1 children will learn to:

- 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.

## In Yr2 children will learn to:

- 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 ( $\times$ ), division ( $\div$ ) and equals (=) signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one 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.



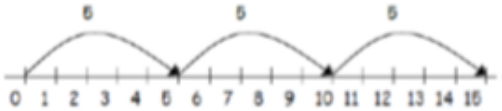
# Strategies

## Multiplication

### Repeated addition

3 times 5 is  $5 + 5 + 5 = 15$  or 5 lots of 3 or  $5 \times 3$

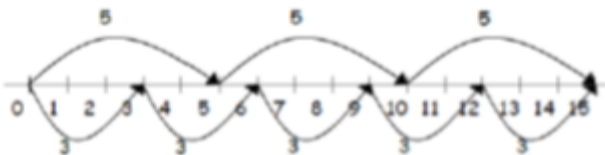
Children learn that repeated addition can be shown on a number line or a bead string.



### Commutativity

Children learn that  $3 \times 5$  has the same total as  $5 \times 3$ .

This can also be shown on the number line or as an array.



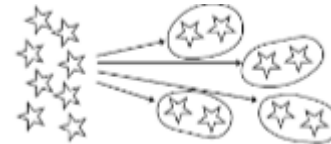
$$5 \times 3 = 15$$

$$3 \times 5 = 15$$

## Division

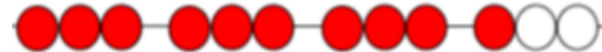
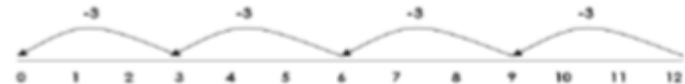
### Sharing equally

8 sweets get shared between 4 people. How many sweets do they each get?



### Repeated subtraction using a bead string or number line

$$12 \div 3 = 4$$



### Array



$$15 \div 3 = 5$$

$$15 \div 5 = 3$$



# Websites

<http://www.topmarks.co.uk/maths-games/5-7-years/place-value-odd-and-even>

Place value and odd and even games

<http://www.topmarks.co.uk/maths-games/5-7years/ordering>

Ordering numbers

<http://www.topmarks.co.uk/maths-games/5-7-years/addition-and-subtraction>

Addition and subtraction games

<http://www.topmarks.co.uk/maths-games/5-7-years/multiplication-and-division>

Multiplication and division games



# Websites

<http://www.ictgames.com/addition.htm>

Addition games with year group and objective shown

<http://www.ictgames.com/subtraction.htm>

Subtraction games with year group and objective shown

<http://www.bbc.co.uk/bitesize/ks1/maths/>

Maths games for KS1

<http://resources.woodlands-junior.kent.sch.uk/maths/>

Maths games for all ages

