



Useful websites to support your child's learning:

<http://www.standards.dfes.gov.uk/primaryframework/mathematics>

The updated curriculum for mathematics – Primary Framework.
Find out the full mathematics curriculum for each year.

www.woodlandsjunior.kent.sch.uk/ichild.html

A school website that contains lots of maths games and activities.

www.amblesideprimary.com/ambleweb/numeracy.html

A school website that contains lots of maths games and activities

www.beam.co.uk/about/MoM/MoM.html

A useful website that will allow you to download games and activities.

www.mathszone.co.uk

Click on the button that states 'key objectives' and then
go to the appropriate year group for your child.

www.coxhoedurham.sch.uk/Curriculum/Numeracy.htm

A school website that provides lots of links to many areas within
maths.

www.bbc.co.uk/schools/digger.htm

Access 'Adventures' and then play the maths activities.

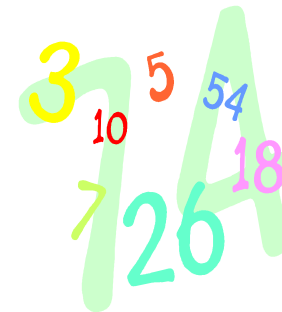
www.nrich.maths.org

Maths website with challenges for more able pupils.

www.bbc.co.uk/revisewise/maths

Revision exercises for end of KS2 SATs.

Maths in Year 1



Parent Booklet

This booklet is to help you to help your child with maths.

It explains some of the different strategies used for calculations in school
and gives ideas for you to help at home, including some activities and
websites.

Copyright

Teaching strategies have been taken from the National Numeracy
Strategy Framework for Teaching Mathematics, DFEE, 1999
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Note 8

The Primary Framework for Mathematics is the most recent update of the mathematics curriculum. There have been a few changes in the content of the curriculum but the basics behind the strategies for calculation remain the same.

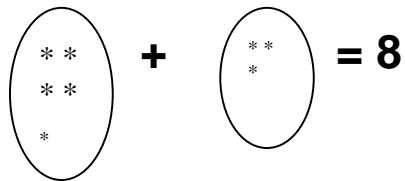
Children are expected to know a wide range of number facts by heart and should be able to use these facts and a range of mental strategies and written methods to work out unknown facts. More emphasis is on mental calculation strategies and up to the age of about 9 (Year 4) informal written recording should take place regularly as it is an important part of learning and understanding. Formal written methods follow only when your child is able to use a wide range of mental calculation strategies.

The booklet outlines a range of strategies that are used in Year 1 and it is hoped that these will assist you in supporting your child with their maths at home.

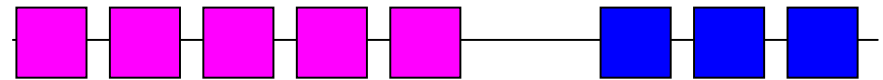
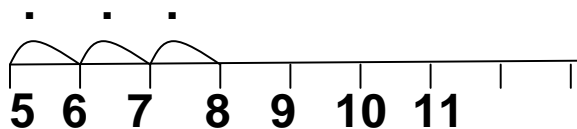
Supporting your Child (Year 1)

Addition

5 + 3 = 8



5 + 3



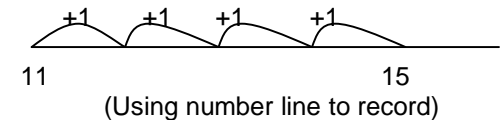
Mental Calculation Strategies (+ and -) Method

Recording

- Use knowledge that addition can be done in any order

$4 + 7 = 7 + 4 = 11$ (Count on in ones)
- Begin to *partition* into 5 and a bit when adding 6,7,8 or 9, then recombine

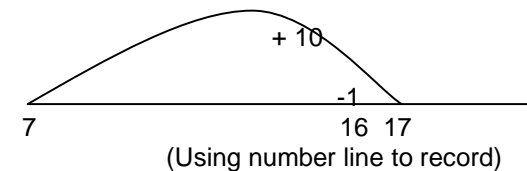
$5 + 7 = 5 + 5 + 2$
 $= 10 + 2$
 $= 12$
- Find a small *difference* by counting up
- Identify near doubles
- Add 9 to single digit numbers by adding 10 then subtracting 1



$6 + 7 = 6 + 6 + 1$
 $= 12 + 1$
 $= 13$ or..

$6 + 7 = 12 + 1$
 $= 13$

$7 + 9 = 7 + 10 - 1$
 $17 - 1 = 16$ or.....



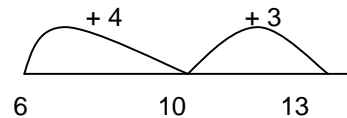
Maths Vocabulary

- Begin to bridge through 10, and later 20, when adding a single digit number

$$6 + 7 = 6 + 4 + 3$$

$$= 10 + 3$$

$$= 13 \quad \text{or...}$$



- Use known number facts and place value to add or subtract a pair of numbers mentally

$$2 + 3 = \hat{1} \quad 2 + \hat{1} = 5$$

$$\hat{1} + 3 = 5 \quad 7 - 3 = \hat{1}$$

$$7 - \hat{1} = 4 \quad \hat{1} - 4 = 3$$

Add or subtract a single digit to or from a *teens* number without crossing 10s boundary:

$$14 + 3, 16 + 4, 17 - 6 \text{ etc.}$$

$$15 + 4 = \hat{1} \quad 15 + \hat{1} = 19 \text{ etc.}$$

Begin to add a *teens* number to a *teens* number without crossing the 10s boundary:

$$14 + 12, 17 + 12, 13 + 15 \text{ etc.}$$

$$14 + 13 = \hat{1}, 14 + \hat{1} = 27 \text{ etc.}$$

This is some of the mathematical vocabulary that your child will use regularly in their maths lessons.

Numbers

and the number system

COUNTING, PROPERTIES OF NUMBERS AND NUMBER SEQUENCES

number

zero, one, two, three... to twenty and beyond

zero, ten, twenty... one hundred

none

how many...?

count, count (up) to

count on (from, to)

count back (from, to)

count in ones, twos... tens...

more, less, many, few

odd, even

every other

how many times?

pattern, pair

PLACE VALUE AND ORDERING

units, ones

tens

exchange

digit

'teens' number

the same number as, as many as

equal to

Of **two** objects/amounts:

greater, more, larger, bigger

less, fewer, smaller

Of **three** or more objects/amounts:

greatest, most, biggest, largest

least, fewest, smallest

one more, ten more

one less, ten less

compare

order

size

first, second, third... tenth, eleventh... twentieth

last, last but one

before, after

next

between, half-way

ESTIMATING

guess how many, estimate

nearly, roughly, close to

about the same as

just over, just under

too many, too few, enough, not enough

Calculations

ADDITION AND SUBTRACTION

+, add, more, plus

make, sum, total

altogether

score

double, near double

one more, two more... ten more

how many more to make...?

how many more is... than...?

how much more is...?

-, subtract, take (away), minus

leave

how many are left/left over?

how many have gone?

one less, two less, ten less...

how many fewer is... than...?

how much less is...?

difference between

half, halve

=, equals, sign, is the same as

Solving problems

MAKING DECISIONS AND REASONING

pattern

puzzle

answer

right, wrong

what could we try next?

how did you work it out?

count out, share out, left, left over

number sentence

sign, operation

Shape activity

At home, or when you are out, look at the surface of shapes.

- ◆ Ask your child – what shape is this plate, this mirror, the bath mat, the tea towel, the window, the door, the red traffic light, and so on.
- ◆ Choose a shape for the week, e.g. a square. How many of these shapes can your child spot during the week, at home and when you are out?

Dice game

You need a 1–6 dice, paper and pencil.

- ◆ Take turns.
- ◆ Choose a number between 1 and 10 and write it down.
- ◆ Throw the dice and say the dice number.
- ◆ Work out the difference between the chosen number and the dice number, e.g. if you wrote down a 2 and the dice shows 5, the difference is 3.

You could also draw a number line to help your child to see the difference between the two numbers.

How old?

Start with your child's age. Ask your child:

How old will you be when you are 1 year older?

How old were you last year?

How old will you be 10 years from now?

and so on.

Cupboard maths

- ◆ Choose two tins or packets from your food cupboard.
- ◆ Ask your child to hold one in each hand and tell you which is heavier, and which is lighter. (Check by reading the weight on each tin or packet.)
- ◆ If he / she is right, they keep the lighter one. Then choose another item from the cupboard, trying to find one that is lighter still.
- ◆ Carry on until your child has found the lightest item in the cupboard. It might be suitable to eat as a prize!



Secret numbers

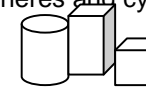
- ◆ Write the numbers 0 to 20 on a sheet of paper.
- ◆ Ask your child secretly to choose a number on the paper. Then ask him / her some questions to find out what the secret number is, e.g.
 - Is it less than 10?
 - Is it between 10 and 20?
 - Does it have a 5 in it?
- ◆ He / she may answer only yes or no.
- ◆ Once you have guessed the number, it is your turn to choose a number. Your child asks the questions.

For an easier game, use numbers up to 10. For a harder game, use only 5 questions, or use bigger numbers.

Out and about

On the way to school, see how many cuboids, spheres and cylinders you can spot.

Which did you see most of?



Car number bingo

- ◆ Each person chooses a target number, e.g. 10. Think about which pairs of numbers add to make your target.
- ◆ You have to see a car that has two numbers that add up to your target number.
- ◆ Say: $4 + 6 = 10$, bingo!
- ◆ Change the target number each week.

You can extend this activity by looking for three numbers which add up to your target number.

K456 XWL

Year 1 Most children learn to:

<p>Using and applying mathematics</p> <p>Solve problems involving counting, adding, subtracting, doubling or halving in the context of numbers, measures or money, for example to 'pay' and 'give change'</p> <p>Describe a puzzle or problem using numbers, practical materials and diagrams; use these to solve the problem and set the solution in the original context</p> <p>Answer a question by selecting and using suitable equipment, and sorting information, shapes or objects; display results using tables and pictures</p> <p>Describe simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions</p> <p>Describe ways of solving puzzles and problems, explaining choices</p>	<p>Counting & understanding number</p> <p>Count reliably at least 20 objects, recognising that when rearranged the number of objects stays the same; estimate a number of objects that can be checked by counting</p> <p>Compare and order numbers, using the related vocabulary; use the equals (=) sign</p> <p><i>Read and write numerals from 0 to 20, then beyond; use knowledge of place value to position these numbers on a number track and number line</i></p> <p>Say the number that is 1 more or less than any given number, and 10 more or less for multiples of 10</p> <p>Use the vocabulary of halves and quarters in context</p>	<p>Knowing & using number facts</p> <p><i>Derive and recall all pairs of numbers with a total of 10 and addition facts for totals to at least 5; work out the corresponding subtraction facts</i></p> <p>Count on or back in ones, twos, fives and tens and use this knowledge to derive the multiples of 2, 5 and 10 to the tenth multiple</p> <p>Recall the doubles of all numbers to at least 10</p>	<p>Calculating</p> <p>Relate addition to counting on; recognise that addition can be done in any order; use practical and informal written methods to support the addition of a one-digit number or a multiple of 10 to a one-digit or two-digit number</p> <p>Understand subtraction as 'take away' and find a 'difference' by counting up; use practical and informal written methods to support the subtraction of a one-digit number from a one-digit or two-digit number and a multiple of 10 from a two-digit number</p> <p><i>Use the vocabulary related to addition and subtraction and symbols to describe and record addition and subtraction number sentences</i></p> <p>Solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups</p>
<p>Understanding shape</p> <p><i>Visualise and name common 2-D shapes and 3-D solids and describe their features; use them to make patterns, pictures and models</i></p> <p>Identify objects that turn about a point (e.g. scissors) or about a line (e.g. a door); recognise and make whole, half and quarter turns</p> <p>Visualise and use everyday language to describe the position of objects and direction and distance when moving them, for example when placing or moving objects on a game board</p>	<p>Measuring</p> <p><i>Estimate, measure, weigh and compare objects, choosing and using suitable uniform non-standard or standard units and measuring instruments (e.g. a lever balance, metre stick or measuring jug)</i></p> <p>Use vocabulary related to time; order days of the week and months; read the time to the hour and half hour</p>	<p>Handling data</p> <p><i>Answer a question by recording information in lists and tables; present outcomes using practical resources, pictures, block graphs or pictograms</i></p> <p>Use diagrams to sort objects into groups according to a given criterion; suggest a different criterion for grouping the same objects</p>	

* **Areas in italics – show end of year (EOY) objectives**