## MAKEY(URCHILD A

 MATHSSTAR!A PARENTE' GUTDETD HELEINGY(UREXILDREN WITE MATES


DASP


Booklet 3 of 3:
Key Stage 2
Year 5 to Year 6

## "IT WASN'T LIKE THIS WHEN L WAS ATECHODL!"

Have you ever wished that you understood current Maths methods better? Many parents find that their children are using methods or strategies, which are very different from those used in the past. This can often cause confusion when trying to support your child at home. This booklet has been prepared by First and Middle School teachers of the Dorchester Area Schools Partnership (DASP) to give you a record of the strategies your child will be using in school.

The main methods used in each year group by the majority of pupils for addition, subtraction, multiplication and division are shown. These methods are introduced throughout the teaching year so most pupils should be familiar with all methods by the end of the year. Each sheet also shows typical maths vocabulary that children will be acquiring and using at this stage.

This is a guide only, children will always progress at different speeds. However, support from you will undoubtedly be of great benefit to them at all times. If you have any questions, your child's teacher will be pleased to discuss the strategies with you.

This booklet is part of a series of 3, covering Year 1 to Year 6. This booklet will be supplemented with extra resources available on the DASP website.

## www.dasp.org.uk/maths.htm

N.B. If you have downloaded this booklet to print it, you may need to expand your print margins slightly to make it fit.

Turn your child into a Mathemagician!



Formal

$$
47+76
$$

(change order to start with larger number)

$47+76$
c) ${ }^{\text {a) }}$ 47
$+76$
123
b)
a) Add 4 groups of tens
a) Partition numbers into tens and units
a) Add units first
b) Then add 7 units
b) Add groups of ten
b) Carry the tens
c) Add units
c) Now add all the tens
d) Add together tens and units


Formal


81- 57 could mean find the difference between the two numbers so we add on from the smallest number.
a) Add on to next multiple of 10
b) Add on groups of ten
c) Add on any extra units needed
a) Partition numbers into tens and units
b) Start with units, 1 take 7
c) To help us do this, we take 1 group of ten from 80 ...
d) ... to give us 11 take 7 which gives 4
e) Now we do 70 take 50 which gives 20
f) Answer is 24
a) Start with the units 1 take 7
b) Take one group of ten from 80, leaving 7 tens
c) This now gives us $\mathbf{1 1}$ take 7 which is 4
d) 7 tens take 5 tens gives 2 tens

Year 5 \& 6 Multiplication

a) Partition number into tens and units
b) Arrange into a grid
c) Multiply $\mathbf{7}$ by 30
d) Multiply 7 by 8
e) Add together results from multiplying

Can you see how points $a$ and $b$ above relate to the answers $c$ and $d$ on the grid in the previous method.
a) Multiply $\mathbf{7}$ by 8 which gives 56
b) We carry the 5 tens
c) Multiply 7 by 3 tens, which gives 21 tens ...
d) ...plus the $\mathbf{5}$ tens equals $\mathbf{2 6}$ tens.

Year 5 \& 6 Division

Visual
$44 \div 7$


Jottings
Formal
$584 \div 4$


## Answer ls: 6 Jumps with 2 left over

Repeated Subtraction
How many 7s can you remove from 44?
a) Keep removing chunks of 7
b) How many chunks of 7 can you remove?
c) Is there a remainder?

How many chunks of 7 in 161?
a) Remove 10 lots of 7 as our chunksize
b) Keep removing chunks of ( $\mathbf{1 0 \times 7 )}$ until you cannot.
c) Use your times table knowledge to remove the last chunk
d) Is there a remainder?
e) How many chunks of 7 have you removed in total?
a) How many 4 s in 5 ? 1 remainder 1
b) Carry the remainder in front of the next digit, then how many 4 s in 18 ? 4 remainder 2
c) Carry the remainder in front of the next digit, then how many 4s in 24? 6
d) How many 4 s in 584 ?

The following are some suggested websites that can help with supporting your child's maths.

BBC Maths
http://www.bbc.co.uk/learning/subjects/maths.shtml
Woodlands Junior School Maths Zone
http://www.woodlands-iunior.kent.sch.uk/maths/index.html
Ambleside Primary School
http://www.amblesideprimary.com/ambleweb/numeracy.htm
TopMarks Education Resources
http://www.topmarks.co.uk/
Loders primary Schools - Maths Problem Solving
http://www.loders.dorset.sch.uk/HomeSchool/witches/problemsolv.htm
CoolMath4kids (US Site)
http://www.coolmath4kids.com/
Rain Forest Maths
http://www.rainforestmaths.com/


The Dorchester Area Schools Partnership (DASP) came into being in 1992. Its mission is simple: to provide the best education for all the students who are educated in the Dorchester area.



