



St David's C of E Primary School Parents Booklet

Written Methods of Calculations (Years 1 and 2)

Do your children ask for help with their maths homework and start using words like 'partitioning', 'number lines', 'repeated addition'....? The purpose of this booklet is to outline the various calculation methods that children are taught, many of which look different to the methods that you may have been taught in your school days.

We hope the explanations and examples of strategies will help you to assist your child at home.

A lot of emphasis in Mathematics teaching is placed on using mental calculations where possible, using jottings to help assist thinking. As children progress through St David's, and are taught more formal written methods, they are still encouraged to think about what mental strategies they could use first and only use written methods for those calculations they cannot solve in their heads.

It is important to encourage children to look first at the problem and then get them to decide which is the best method to choose - pictures, mental calculations with or without jottings, structured written methods, appropriate equipment or even a calculator.

When faced with a calculation problem, encourage your child to ask:

Can I do this in my head?

Do I need to use a written method?

Should I do this in my head, using drawings or jottings to help me?

Year 1

Addition

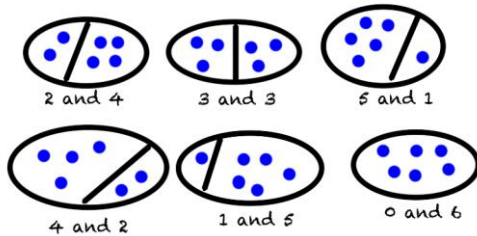
Year 2

Pictorial representations

Why are you drawing pictures in maths?

It helps me see the numbers so I can count them one at a time, as my confidence grows I could count in 2s so it's quicker!

Make 6

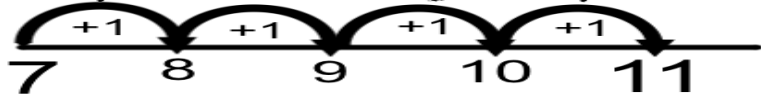


Counting on using a number line

Why use a number

It helps me to show on paper what is going on in my head. I can jump in lion leap tens and bunny hop ones!

jump 4 bunny hop ones!



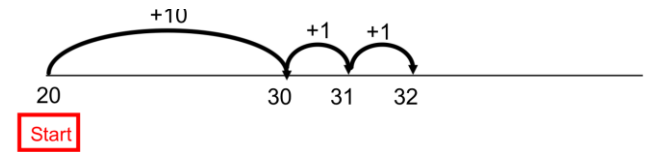
$$7 + 4 = 11$$

Counting on using a number line

Why use a number line?

It helps me to show on paper what is going on in my head. I can jump in lion leap tens and bunny hop ones!

$$\begin{array}{l} \text{T U} + \text{T U} \\ 20 + 12 = 32 \end{array}$$



Partitioning

What does it mean to partition? How does that help

It helps when I break the numbers up into tens and ones... then I can add in tens followed by ones

$$\begin{array}{r} 24 + 12 = 36 \\ \begin{array}{l} 20 \quad 4 \quad 10 \quad 2 \end{array} \end{array}$$

$$\begin{array}{r} 20 + 10 = 30 \\ 4 + 2 = 6 \\ \hline 36 \end{array}$$

Year 1

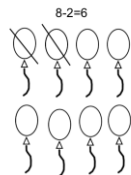
Subtraction

Year 2

Pictorial representations

Why are you drawing pictures in maths?

It helps me to see what I need to cross out or take away to see what I have left



Finding the difference

Why do you need to find the difference or compare numbers to subtract?

It helps me think about how many jumps the numbers are apart

$$8-5=$$

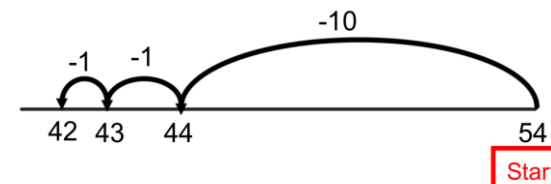
means the **difference between** 8 and 5 or the **difference between** 5 and 8 and how many jumps they are apart...

Counting back

Why use a number line?

I can see clearly that I am jumping backwards, subtracting, taking away,

$$\begin{array}{r} \text{T U} - \text{T U} \\ 54 - 12 = 42 \end{array}$$

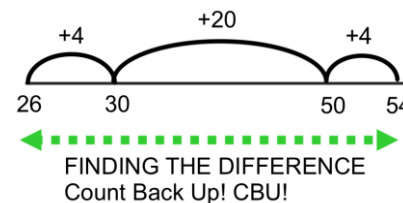
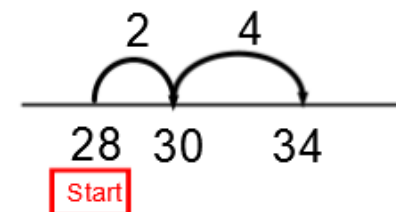


Count Back Up - CBU

How do you decide whether to count on or count back?

If the numbers are near each other, it's easier to count back up to it – CBU!

$$54-28=26$$



$$2 + 4 = 6$$

Year 1

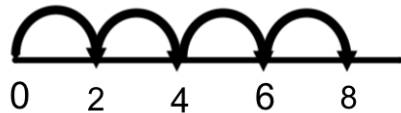
Multiplication

Year 2

Repeated addition

Why are you adding when you should be multiplying?

It helps me see how numbers keep getting



Doubling

Why double numbers using

Using objects helps me visualise numbers doubling



Double 3 is 6

$$3 \times 2 = 6$$

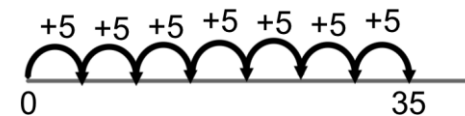
Repeated addition

How is multiplication the same as repeated addition?

The number line helps me see each group of 5 clearly.

$$5 + 5 + 5 + 5 + 5 + 5 =$$

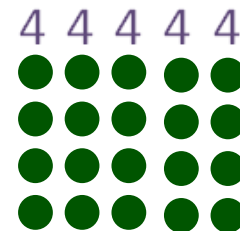
$$7 \times 5 = 35$$



Arrays

What's an array?

You can draw columns and rows of the numbers and then count them



$$4 \times 5 = 20 \text{ (4, 5 times)}$$

Year 1

Division

Year 2

Grouping

What is grouping and how does it help dividing?

I can move objects physically to help me understand dividing is sharing equally



$$12 \div 3 = 4$$

Halving

Why is it important to halve numbers?

It helps me to notice the inverse, that I can make a number bigger by doubling it, then inverse the process by halving it – objects help me see this



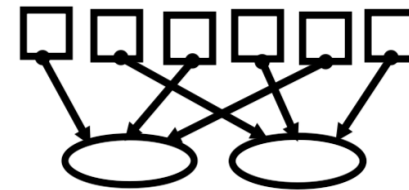
Half of 6 is 3

$$6 \div 3 = 3$$

Sharing

Why are you drawing in Maths?

It helps me share out equally and count in equal steps



6 sweets shared between 2 people!

Grouping

What is grouping and how does it help?

If there's a 'maths story' I can pick out the numbers and put them in groups to help me count

