

In summary:

Children are taught a whole range of mental calculation methods which they will use to solve problems in their heads.

Children will be taught to write things down to help their mental calculations, such as number lines.

When children use written methods for calculation, these methods will not necessarily involve lining numbers up in columns, but might use number lines or grids.

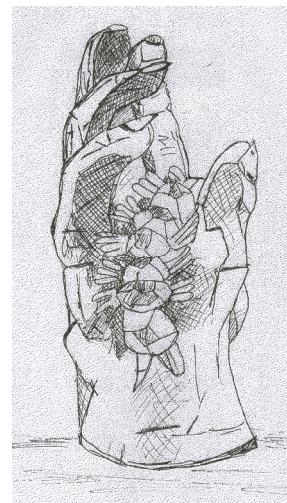
The use of the calculator should not be seen as “cheating”. To be able to use a calculator correctly to solve problems is an important part of children’s mathematical development.

Children will be actively encouraged to apply their mathematics to the world around them and to put their learning in to context.

We need your help to support your child on their mathematical journey

Thank you!

KEF 2009



Mathematics at



Junior School

How does it work?

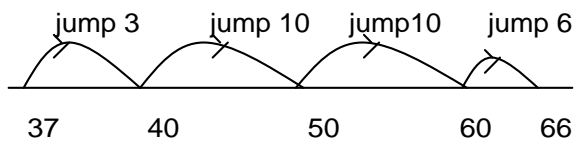


Examples of:

Addition

Using a number line.

We will solve $37 + 29 = 66$



Using this partitioning method

we will solve $37 + 29 = 66$

$$\begin{aligned} 37 &= 30 + 7 \\ 29 &= 20 + 9 \\ \hline &= 50 + 16 \end{aligned}$$

Using the "column" method

we will solve $36 + 57 = 93$

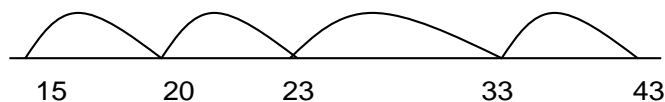
$$\begin{array}{r} 36 \\ +57 \\ \hline 93 \\ 1 \end{array}$$

Subtraction

Using a number line

We will solve $43 - 28 = 15$

jump back 5 jump back 3 jump back 10 jump back 10



Using the partitioning method

$43 - 28 = 15$

$$\begin{aligned} 43 &= 30 + 13 \\ 28 &= 20 + 8 \\ \hline 10 + 5 &= 15 \end{aligned}$$

Using the column method

$43 - 28 = 15$

$$\begin{array}{r} 3 \quad 13 \\ 43 \\ - 28 \\ \hline 15 \end{array}$$

Examples of:

Multiplication

Multiplication as grouping or sharing

Looking at the rows of 4 dots, this can be thought of as 3 lots of 4, or $4 + 4 + 4$ or 4×3



Multiplication using the grid method

$357 \times 8 = 2856$

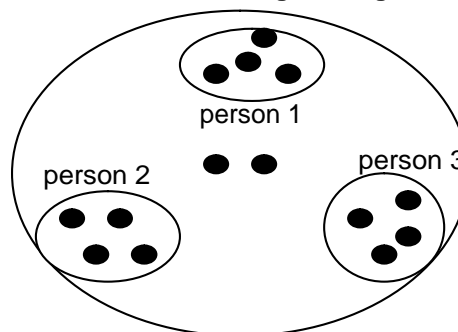
x	300	50	7
8	2400	400	56

Multiplication using the expanded column method

$$\begin{array}{r} 73 \\ \times 54 \\ \hline (70 \times 50) \quad 3500 \\ (3 \times 50) \quad 150 \\ (70 \times 4) \quad 280 \\ (3 \times 4) \quad 12 \\ \hline 3942 \end{array}$$

Division

Division using sharing



$14 \div 3 = 4$ remainder 2

Division using chunking method

(can be done on a number line to support)

$148 \div 6 = 24r4$

$$\begin{array}{r} 6 \overline{)148} \\ - 60 \quad (6 \times 10) \\ \hline 88 \\ - 60 \quad (6 \times 10) \\ \hline 28 \\ - 12 \quad (6 \times 2) \\ \hline 16 \\ - 12 \quad (6 \times 2) + \\ \hline 4 \quad \quad \quad 24 \end{array}$$