Parent Maths Workshop

Aims of the Workshop

- ✓ To outline the main changes to the primary maths curriculum.
- ✓ To provide parents with ideas and activities that they can use at home to support children's maths development.
- ✓ To outline the clear progression of the four calculation methods and how these are taught at Yealand.

Key Aims of the Maths Curriculum

* **Fluent recall** of **mental maths facts** e.g. times tables, number bonds. Etc.
* To **reason** mathematically – children need to be able to **explain** the mathematical concepts with number sense; they must explain **how** they got the answer and **why** they are correct.
* **Problem solving** – applying their skills to real-life contexts.

Assessment at Yealand

- ✓ **Half termly tests to assess children's progress in line with the key objectives for their year group**
- ✓ Use to inform future lesson planning
- ✓ **Show where they are up to in relation to year group objectives (entering, developing, secure)**
- ✓ SEN children might be working on a stage below
- ✓ **Gaps used to set children's targets**

- ✓ In addition, we have weekly basic skills sessions which are also linked to the yearly objectives – children work at the stage that is appropriate to them – might be lower stage to catch up with the gaps

TIME TO HAVE A GO!

ADDITION

Addition – Upper KS2

- Column Method

This method remains efficient when adding larger numbers and decimals. It is a quick and reliable method.

379 + 92 = 471

```
  3 7 9
    9 2 +
-------
  4 7 1
-------
  1 1
```

carrying ‘ten’ and ‘one hundred’

SUBTRACTION

Subtraction – Lower & Upper KS2

Column Method – Decomposition:

Children must keep being referred back to place value – it is 3 tens not just 3.

$$\begin{array}{r} {\scriptstyle 1} \\ 6\not{7}\,6 \\ 3\,9\,- \\ \hline 3\,7 \end{array}$$

$$\begin{array}{r} {\scriptstyle 1\ \ 1} \\ 1\not{2}\,3\,7 \\ 8\,4\,- \\ \hline 1\,5\,3 \end{array}$$

Borrowing ‘ten’ not 1

MULTIPLICATION

Grid Method:

43 X 6

X	6
40	240
3	18
	258

This method links directly to the mental method of multiplication.

124 X 32

X	30	2	
100	3000	200	3200
20	600	40	640
4	150	8	158
			3998

MULTIPLICATION cont.

Multiplication – (Lower) & Upper KS2

This method is the next step on from the expanded method.

Short Multiplication:

4 3 X 6

```
  4  3
     6  x
  ------
  2 5 8
  ------
    1
```

Once again children have to be secure with their place value and know they are carrying ‘ten’ not one.

MULTIPLICATION cont.

Multiplication – Upper KS2

Short Multiplication for 2-digit x 2 digit:

5 6 x 2 7 =

```
   5 6
   2 7 x
 3 9 2
 4
1 1 2 0 +
1
1 5 1 2
```

When multiplying by the ten (20 in this example) children must remember to put the place holder '0' in the units column.

DIVISION

Division – (Lower) & Upper KS2

Expanded Method – Chunking:

87 ÷ 6 = 14 r 3

$$6\overline{)87}$$

$$\begin{array}{rll} 60 & - & 6 \times 10 \\ \hline 27 & & \\ 24 & - & 6 \times 4 \\ \hline 3 & & \end{array}$$

This method is based on subtracting multiples of the divisor or 'chunks'.

Initially they subtract several chunks but with practice children will look at the biggest multiples of the divisor that they can subtract.

DIVISION cont.

Division – (Lower KS2) & Upper KS2

This method is the next step after chunking. It is a more compact method.

Short Division - TU ÷ U:

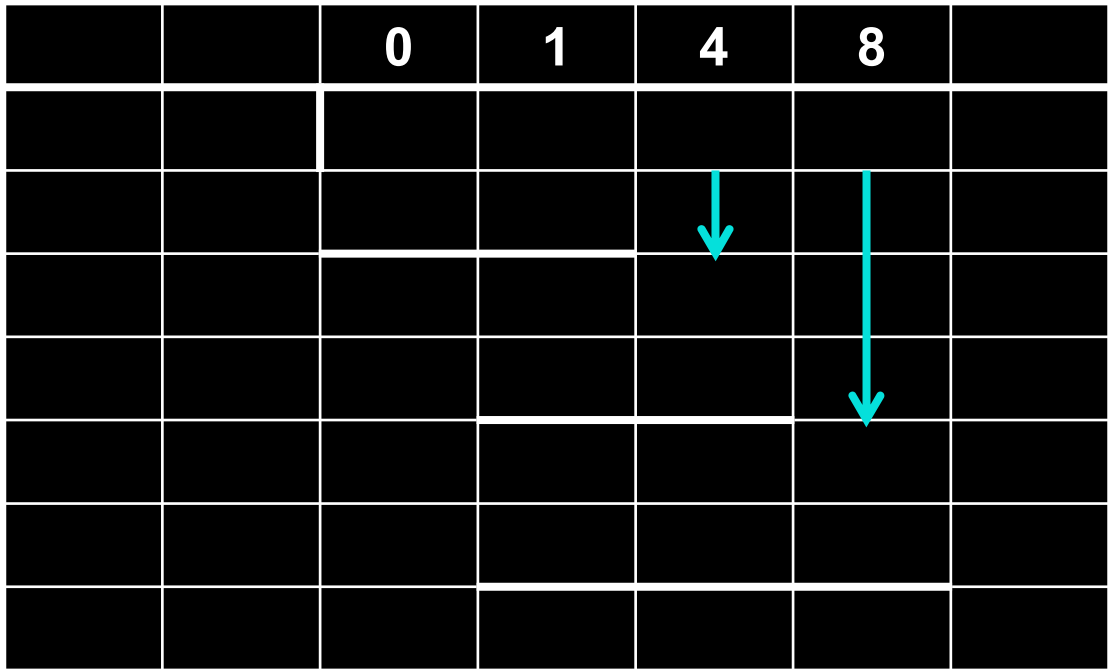
81 ÷ 3 =

$$3\overline{)\,8^{2}1}\quad 27$$

Links to chunking:
3 x 20 = 60
80 – 60 = 20 which the '2' represents
3 x 7 = 21
No remainder

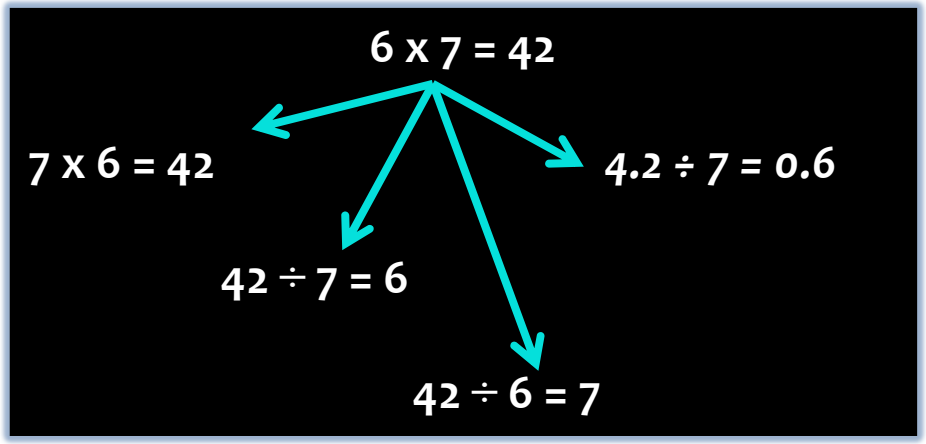
Answer = 27

DIVISION cont.



KEY INSTANT RECALL FACTS

- Times tables up to 12 x 12
- Square numbers
- Prime numbers
- Fraction, decimal and percentages equivalences
- Metric conversions



Good practice in mathematics

* All children need to learn maths in a real life context.
* As well as knowing 7x7=49. Children need to be able to do the following:
* There are 7 fields, each field has 7 sheep in them. How many sheep are there in total?

* Children need to be able to explain how they have calculated or solved a problem.

* In the new curriculum, written calculations are taught at an earlier age. The mental methods are essential for supporting pupils understanding of these written calculations.

How you can help at home

* Telling the time.
* The ability to estimate.
* To use maths in a real life context.
* Cooking.
* Shopping
* Practise times tables
* Support with homework using methods we've shown you.

How to help at home – USEFUL WEBSITES

- www.oxfordowl.co.uk – resources and programmes to use at home
- www.conkermaths.com (need Abode Flash Player on computer)
- www.sumdog.com – tailored games for children
- http://www.mathplayground.com – full of resources matched to different areas of Maths
- Links on Yealand website www.yealand.lancs.sch.uk