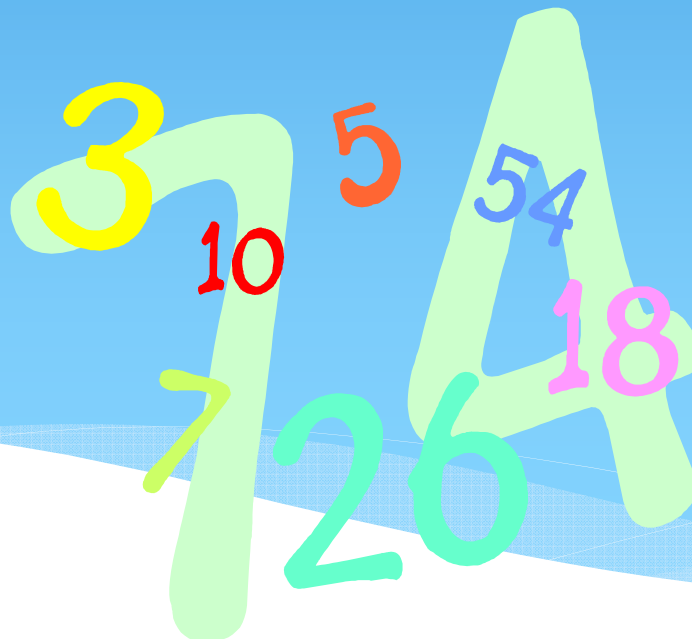




Parent Maths Workshop



Aims of the Workshop

- ✓ **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. counting in 2's, 5's and 10's, 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 question mats 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**

TIME TO HAVE A GO!

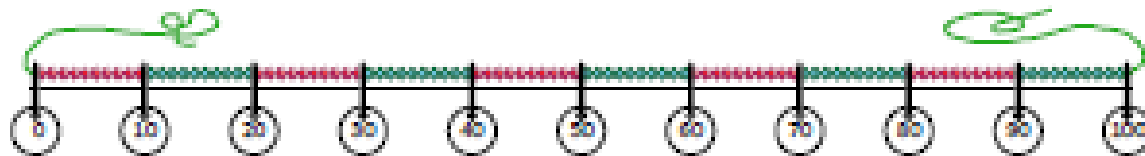
Addition & Subtraction KS1

- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.

Using place value

Count on in ones/counting in tens, e.g. knowing $45 + 1$ or $45 + 10$ without counting on in ones.

1	2	3	4	5
11	12	13	14	15
21	22	23	24	25
31	32	33	34	35
41	42	43	44	45



Bead strings and 1-100 number grid help counting on/back in tens.

We do this by using objects and pictorial representations including the number line to 20 in Year 1 then to at least 100 in Year 2.

LETS HAVE A GO!

Using a number bead count to 11

Using a number bead start from 20 and count backwards

Using a number bead count in 10s




Lets do the same but with a 100 square

Addition & Subtraction

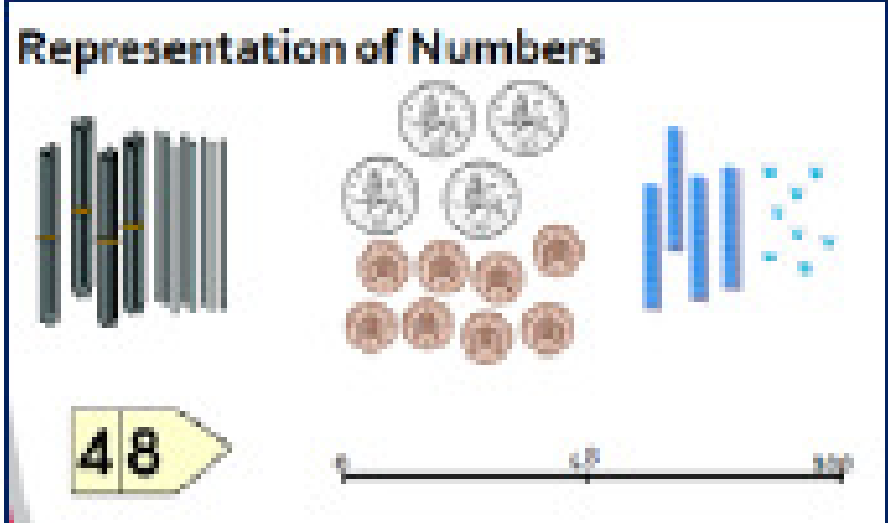
- Year 1 - Begin to recognise the place value of number beyond 20 (tens and ones).
- Year 2 – Recognise the place value of each digit in a two digit number (tens, ones)

- **LETS HAVE A GO!**

- Using diennes lets make some numbers
- Can you draw them too?
- Use coins

15	16	17
fifteen	sixteen	seventeen
		

Representation of Numbers



Addition & Subtraction

- **Year 1**

- Read, write and understand number sentences involving addition (+), subtraction (-), equals (=) signs.
- Add and subtract 1 digit and 2 digit numbers to 20 (using concrete objects and pictorial representations)

Using a number line complete these sums

$$2 + 10 = \qquad 6 + 14 =$$

$$12 - 3 = \qquad 20 - 7 =$$

- **Year 2**

- Recall and use addition and subtraction facts to 20
- Add and subtract numbers using concrete objects, pictorial representations, and mentally using 2 digit number and ones, a 2 digit number and tens, 2 2 digit numbers, adding 3 1 digit numbers.

Using a 100 square to complete these sums:

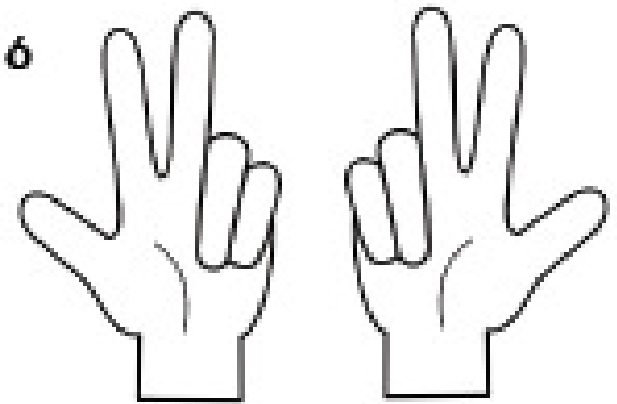
$$20 + 10 = \qquad 34 + 10 = \qquad 20 - 10 = \qquad 45 - 20 =$$

Now use the diennes equipment to complete them.

MULTIPLICATION Yr1

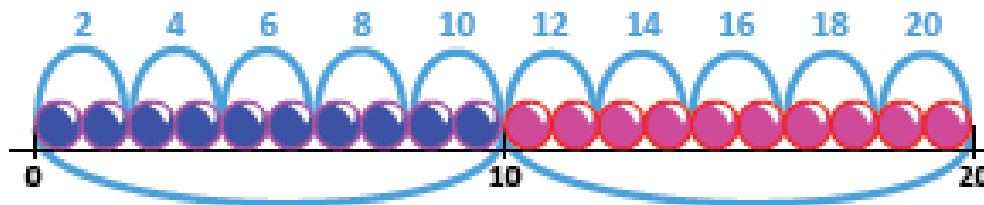
Doubling and halving

Find doubles to double 6 using fingers.



Counting in steps ('Clever' counting)

Count in 2s and 10s.



Grouping

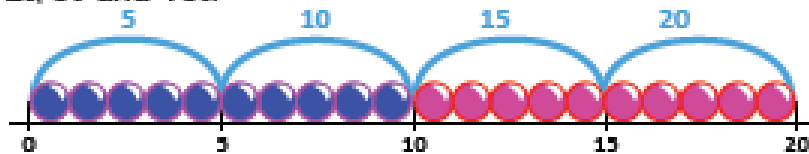
Begin to use visual and concrete arrays and 'sets of' objects to find the answers to '3 lots of 4' or '2 lots of 5', etc.



MULTIPLICATION Yr2

Counting in steps ('Clever' counting)

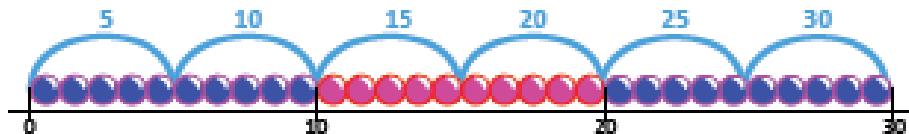
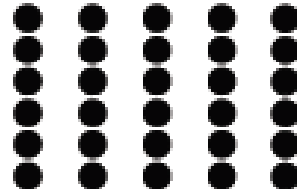
Count in 2s, 5s and 10s.



Begin to count in 3s.

Grouping

Use arrays to find answers to multiplication and relate to 'clever' counting.
e.g. 3×4 as three lots of four things
and 6×5 as six steps in the 5s count
as well as six lots of five.

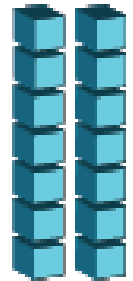


Understand that 5×3 can be worked out as three 5s or five 3s.

Use number facts

Know doubles to double 20

$$\text{Double } 7 = 14$$



Using the cubes Let's have a go:

2 lots of 3

6 lots of 2

5 lots of 10

Double 10 is...

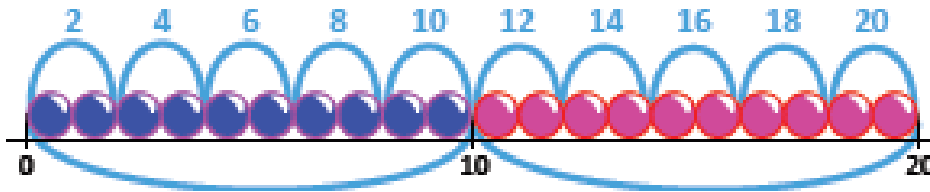
Double 5 is...

Double 7 is...

DIVISION Yr1

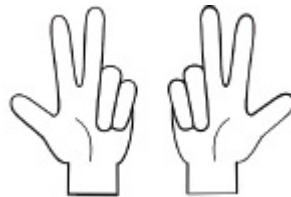
Counting in steps ('Clever' counting)

Count in 2s, and 10s.



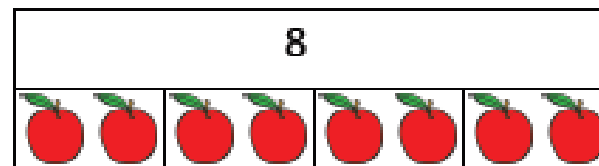
Doubling and halving

Find half of even numbers up to 12 including realising that it is hard to halve an odd number.



Sharing

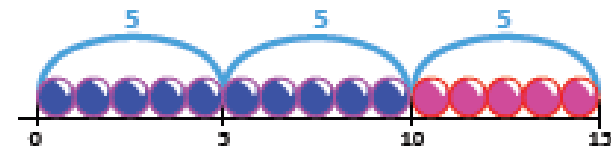
Begin to find half of a quantity using sharing, e.g. half of 10 cubes by giving one each repeatedly to two children.



DIVISION Yr2

Counting in steps ('Clever' counting)

Count in 2s, 5s and 10s



Grouping

Relate division to multiplication by using arrays of towers of cubes to find answers to division, e.g. how many towers of five cubes can I make from 20 cubes as $\square \times 5 = 20$ and also as $20 \div 5 = ?$



half of 20 is...

20	
?	?

Using the 5p coins Let's have a go:

How many 5's do I count to get to 20? How many 5's do I count to get to 30?

Using the cubes Let's have a go:

Half of 10 is... Half of 5 is... Half of 8 is...

KEY INSTANT RECALL FACTS

➤ Year 1

- Recall and use doubles of all numbers to 10 and corresponding halves
- Count in multiples of 2, 5, 10

➤ Year 2

- Recall and use multiplication and division facts for the 2, 5 and 10 x tables
- Count in steps of 2, 3 and 5 from 0 and in tens from any number, forwards and backwards

Good practice in mathematics

- * All children need to learn maths in a real life context.
- * As well as knowing $2 \times 2 = 4$. Children need to be able to do the following:
 - * There are 2 fields, each field has 2 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

- * See booklet provided for lots of examples
- * 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.mrcrammond.com (need Adobe Flash Player on computer)
- www.topmarks.co.uk/maths-games/5-7-years/counting – full of resources matched to different areas of Maths
- www.bbc.co.uk/bitesize/ks1/maths/ - resources and programmes to use at home
- www.mathszone.co.uk - resources and programmes to use at home
- Links on Yealand website www.yealand.lancs.sch.uk