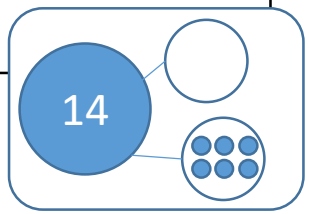
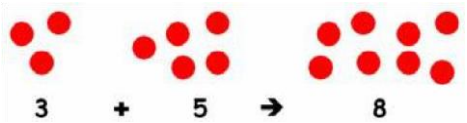
Addition & Subtraction

Year 1 Statutory Requirements

- Add and subtract using the +, - and = signs.
- Add one-digit and 2-digit numbers to 20, e.g. 7 + 6 = and 15 + 4 =
- Subtract one-digit and 2-digit numbers to 20, e.g. 8 – 3 = and 16 – 5 =
- Know number bonds and related subtraction facts within 20, e.g. If you know that 6 + 4 = 10, then you must know that 10 – 6 = 4.
- Solve simple problems involving addition and subtraction.
- Solve missing number problems, e.g. 7 = ◯ - 9 or ◯ + 6 = 14.

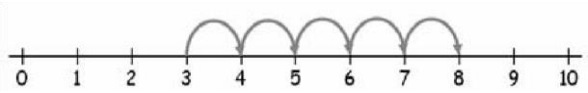


Count 2 sets to find the total
Children collect objects and recognise they need two groups which are put together to make a total.

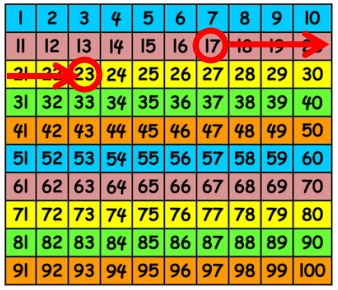


Count on from the largest number
Start with counting on using practical resources and relate this to counting on using fingers 5 + 3 =

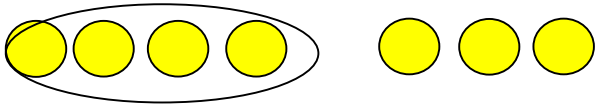
Count on using a number line



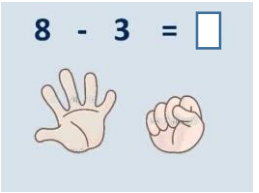
Count on the 100 square crossing the tens boundary in ones
17 + 6 =



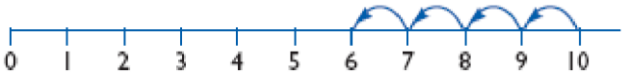
Collect 2 sets and practically take away to find what is left
Children practically collect objects for first amount, taking away the second amount and know the answer is what is left 7 – 3 = 4 left



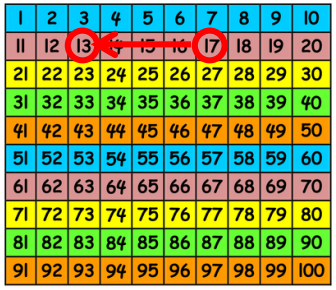
Count back to find 1 less, 2 less, 3 less etc start with taking away using practical resources and relate this to taking away fingers.



Count back using a number line



Count back in ones on the 100 square
17 – 4 =

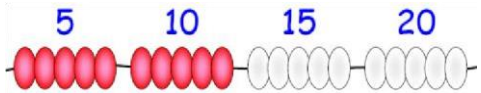


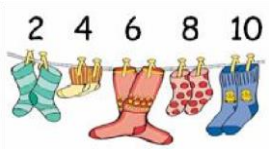
Multiplication & Division

Year 1 Statutory Requirements

- Solve simple one-step problems involving multiplication and division.
- Calculate the answer using concrete objects, pictorial representations and arrays with support.

Give children experience of counting equal group of objects in 2s, 5s and 10s

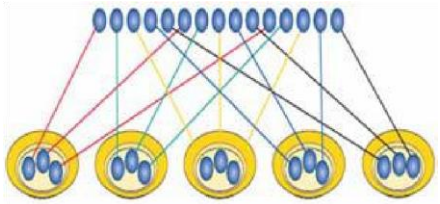




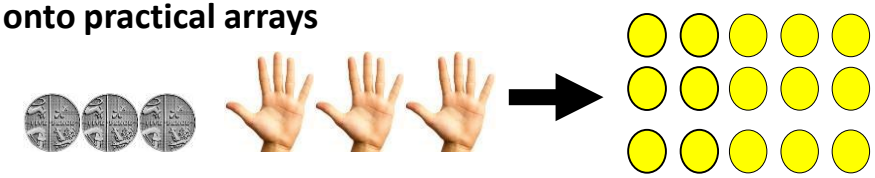
Halving and quartering practically with shapes

Sharing practically into groups

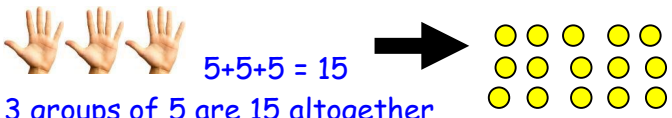
15 cakes shared between 5 people



Show and understand different visual representations of '3 groups of 5 etc' moving onto practical arrays

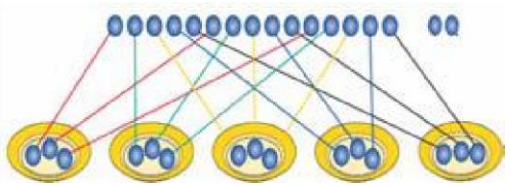


Repeated addition



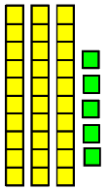
Sharing practically into groups with remainders using their knowledge of number facts as to whether they can share equally. Children recognise division sign and link to what this practically shows.

17 cakes shared between 5 people



Addition & Subtraction

Counting on tens and ones on the 100 square using practically resources to support. (Dienes)



Partitioning with dienes to support visual understanding

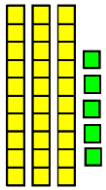
35 + 23

= 30 + 5 + 20 + 3

= 30 + 20 + 5 + 3

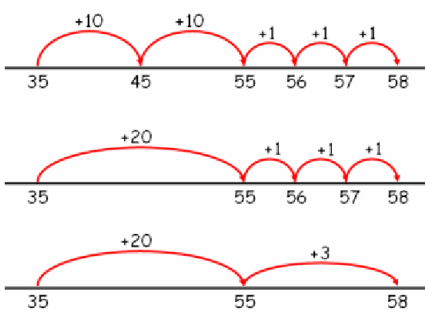
= 50 + 8

= 58



Counting on through partitioning on a number line

25 + 23 =

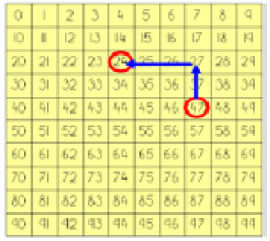


Year 2 Statutory Requirements

- Solve problems with addition and subtraction:
  - using concrete objects and pictures
  - apply their knowledge of mental and written methods
- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- Add and subtract numbers, including:
- – a two-digit number and ones
- – a two-digit number and tens
- – two two-digit numbers
- – adding three one-digit numbers
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems, e.g. If you know that 26 + 4 = 30, then you must know that 30 – 4 = 26.

Counting back tens and ones supported practically

47-23 =



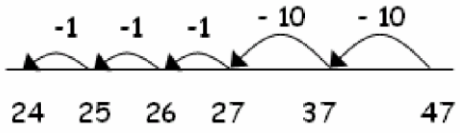
Partitioning (with practical resources to support understanding of place value)

47 - 23 =

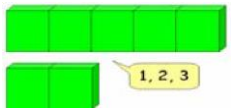
47 – 20 - 3

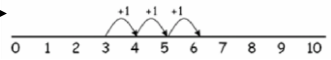
27- 3 = 24

Relate this to counting back on an open number line



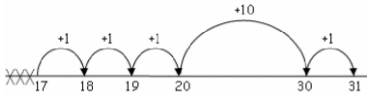
Counting on (difference) **The difference between 3 and 6**





31 – 17 =

Start at 17 and count on to 31



Multiplication & Division

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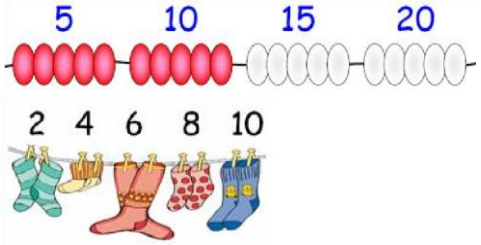
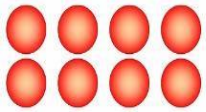
Give children experience of counting equal groups of objects in 2s, 3s, 5s and 10s



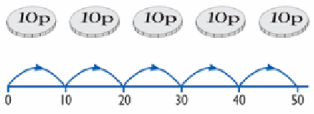
Describe an array



4 x 2 = 8

2 x 4 = 8

Relate repeated addition to X sign



10p + 10p + 10p + 10p + 10p = 50p

10p x 5 = 50p

5 jumps of 10

Represent X number sentences using practical representations

10 x 4 =

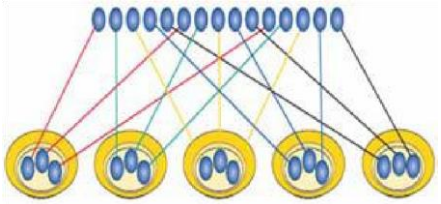
2 x 4 =

Year 2 Statutory Requirements

- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.
- Multiply and divide within the 2, 5 and 10 multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.
- Solve problems involving multiplication and division, using objects, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

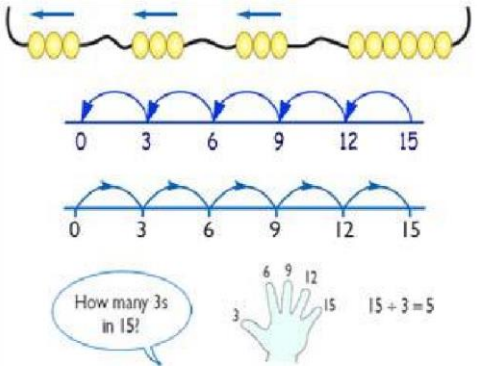
Continue sharing practically reading division number sentences and what this means practically

15 cakes shared between 5 people



Grouping

15 cakes put into groups of 3



Progress onto grouping with remainders

17 ÷ 3 =