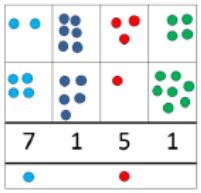
Year 4 calculation guidance

+ Addition +

More Sum Altogether Add Plus Total

Methods from Year 3 to be continued in Year 4: Use concrete objects to combine Counting on using a number line.

Add ones, tens, hundreds and thousands to a four-digit number



Children can draw a pictoral representation of the columns and place value counters to further support their learning and understandina.

Compact addition (integers only) with numbers up to four digits

e.g.

```
  7648
+ 1486
  9134
  1 1 1
```

Expanded addition may be used for decimals in real contexts e.g. money and length.

£11.35+ £12.43=

£10 + £1 + 30p + 5p +
£10 + £2 + 40p + 3p
£20 + £3 + 70p + 8p = £23.78

- Subtraction -

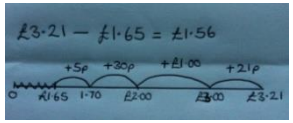
minus Subtract take away less than difference between

Methods from Year 3 to be continued in Year 4: Use concrete apparatus, part-part whole, number line. Count back on a number line.

Subtract ones, tens, hundreds, and thousands from a four-digit number.

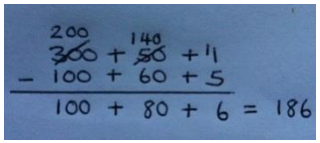
Number line method (2, 3, 4 digit numbers, extending to decimals in a real context)

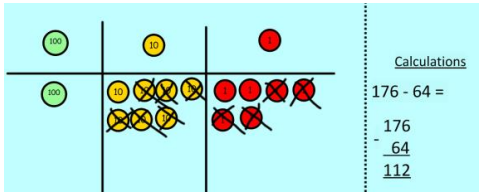
e.g.



Expanded subtraction

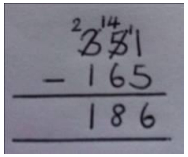
e.g. 354 - 165





Use base 10 or place value counters alongside the written calculation to help to show working.

Compact subtraction (regrouping)



× Multiplication ×

Multiply times lots of groups of multiple of product

Methods from Year 3 to be continued in Year 4: Understanding that multiplication is the inverse of division, repeated addition, expanded column method

ALL times tables facts to 12 x 12 should be known by end of year 4 including multiplying by 0 and 1.

Children should learn to multiply three numbers together.

4 x 6 x 3=

4 x 6= 24 x 3= 72

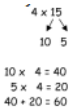
Grid method TU x U or HTU X U

This can be used to help children understand exactly what you are multiplying.

e.g. 245 x 6

x	200	40	5	Total
6	1200	240	30	1470

Partitioning



Short Multiplication

6 x 23 =

```
  23
×  6
 138
 1 1
```

Show the carrying below.

÷ Division ÷

Share equally group equally divide remainder factor

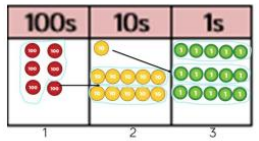
Methods from Year 3 to be continued in Year 4: Using number lines to support repeated subtraction. Then move onto partitioning.

Focus on understanding, representing and remembering times tables facts for ALL times tables up to 12 x12 including division facts.

4x8=32. 8x4=32, 32÷4=8, 32÷8=4

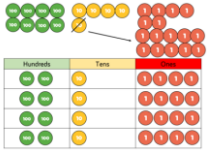
Start with place value counters

615 ÷ 5



1. Make 615 with place value counters.
2. How many groups of 5 hundreds can you make with 6 hundred counters?
3. Exchange 1 hundred for 10 tens.
4. How many groups of 5 tens can you make with 11 ten counters?
5. Exchange 1 ten for 10 ones.
6. How many groups of 5 ones can you make with 15 ones?

Pictorial



Abstract