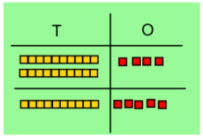
Year 3 calculation guidance

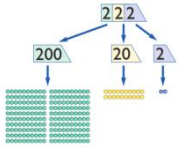
+ Addition +

More Sum Altogether Add Plus Total

Methods from Year 2 to be continued in Year 3: Use concrete objects to combine Counting on using a number line.

Understand place value – can partition numbers & recombine numbers to support column addition.





24 + 15=

Add together the ones first then add the tens. Use the Base 10 blocks first before moving onto place value counters.

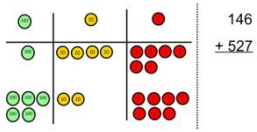
Expanded addition, TU then TU crossing tens barriers, then HTU (three digits)

34 + 62=

30 + 4

60 + 2

90 + 6 = 96



146
+ 527

494 + 368 =

400 + 90 + 4

300 + 60 + 8

700 +150 +12 =862

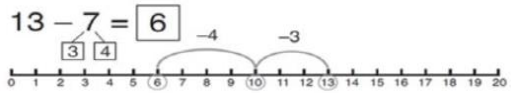
then Compact addition, 3 digits plus 3 digits.

494
+368
862
1 1

- Subtraction -

minus Subtract take away less than difference between

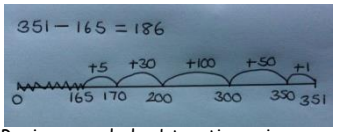
Methods from Year 2 to be continued in Year 3: Use concrete apparatus, part-part whole, number line or 100 square, then mentally. Count back on a number line.



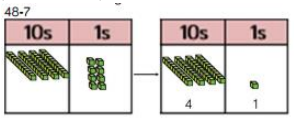
Start at 13. Take away 3 to reach 10. Then take away the remaining 4 so you have taken away 7 altogether. You have reached your answer.

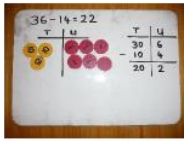
Number line method (2 and 3 digit numbers)

351-165=186



Begin expanded subtraction using concrete objects and pictorial representations.





Start to use Compact subtraction, 3 digits minus 3 digits..

Not Regrouping

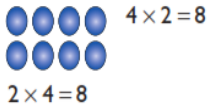
Regrouping

Show the carrying at the top as above.

× Multiplication ×

Multiply times lots of groups of multiple of product

Methods from Year 2 to be continued in Year 3: Understanding that multiplication is the inverse of division. Using groups and arrays.

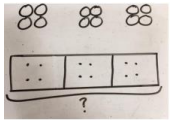


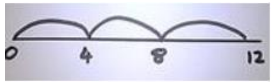
Focus on understanding, representing and remembering times tables facts for 2,5,10,3,4 and 8 times tables, including division facts

e.g

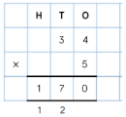
4x8=32. 8x4=32, 32÷4=8, 32÷8=4

Understand that multiplication is repeated addition e.g. 3x4 = 4+4+4. Use concrete, pictorial and abstract methods.





Expanded Column Method Compact Column Method



Note - before moving to any TU x U, the children will need be able to multiply a multiple of 10 by a single digit

÷ Division ÷

Share equally group equally divide remainder factor

Methods from Year 2 to be continued in Year 3: Understand division as sharing equally into groups. Share into groups using concrete apparatus, and pictorial representations.

Divide objects between groups and see how much is left over 14 ÷ 3 =

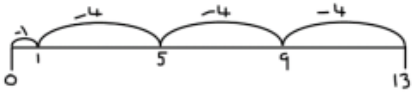
Focus on understanding, representing and remembering times tables facts for 2,5,10,3,4 and 8 times tables, including division facts.

e.g

4x8=32. 8x4=32, 32÷4=8, 32÷8=4

Use number lines to support repeated subtraction.

'3 groups of 4, with 1 left over'



		(T0xU)	