Driffield Junior School

Year 3 Calculation Policy

Caring, learning, sharing – Success for all

I can add two numbers (up to 3 digits) using partitioning.

e.g. 385 + 176 = ?

Step 1: Partition into H, T, U then add.

H	T	U	+	H	T	U	=	H	T	U
		5	+			6	=		1	1
	8	0	+		7	0	=	1	5	0
3	0	0	+	1	0	0	=	4	0	0

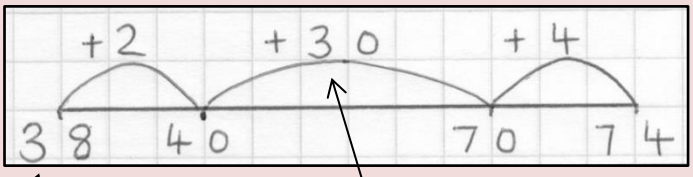
Step 2: Recombine the totals.

400 + 150 + 11 = 561

I can subtract numbers (up to 3 digits) in three steps using a number-line.

e.g. 74 – 38 = ?

Step 1:



record each interval

smallest number at the left

Step 2: Recombine the totals.

30 + 4 + 2 = 36

I can multiply a 2 digit number with a single digit number by partitioning the 2 digit number.

e.g. 34 x 4 = ?

Step 1: Partition into H, T, U and multiply

TU	x	U	=	H	T	U
30	x	4	=	1	2	0
4	x	4	=		1	6

use known number facts e.g. 3x4=12 so 30x4=120

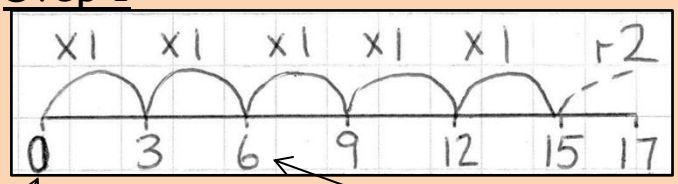
Step 2: Recombine the totals.

120 + 16 = 136

I can divide a 2 digit number by a single digit number using a number-line (can be reinforced pictorially using 'lots of').

e.g. 17 ÷ 3 = ?

Step 1:



record each interval

begin at 0, count in multiples / 'lots of'

Step 2: Answer

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Year 4 Calculation Policy

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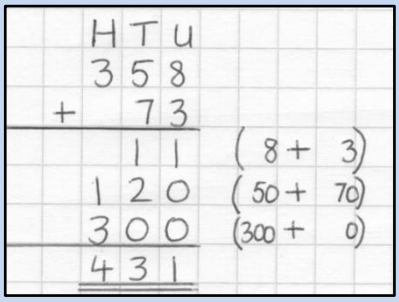
I can add two numbers (up to 4 digits) using expanded column addition.

e.g. 358 + 73 = ?

Step 1: Partition and calculate



Step 2: Total

I can subtract numbers (up to 4 digits) using a number-line *and column addition*.

e.g. 1474 – 827 = ?

Step 1:

record each interval

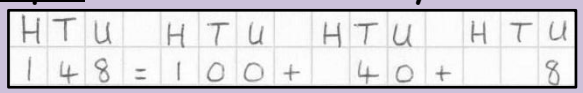
smallest number at the left

Step 2: Total

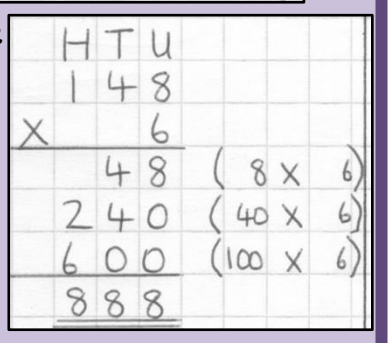
I can multiply a three digit number with a single digit number using expanded short multiplication by partitioning the three digit number (use column method for HTU x U by summer term).

e.g. 148 x 6 = ?

Step 1: Partition and lay out



Step 2: Calculate

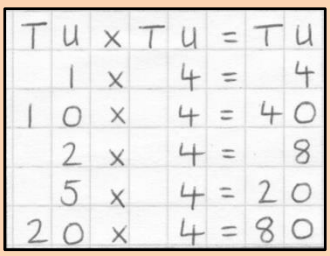


Step 3: Total

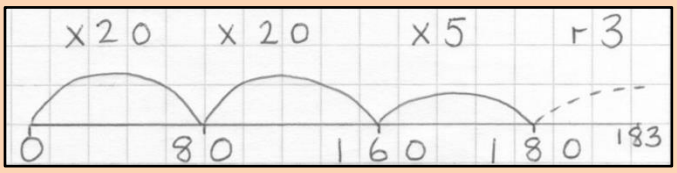
I can divide 2 and 3 digit numbers by a single digit number using known division facts.

e.g. 183 ÷ 4 = ?

Step 1: Write down known facts



Step 2: Calculate



Step 3: Answer 45 r 3

I can add two numbers (with 4 or more digits) using column addition.

e.g. 5684 + 4913 = ?

	Th	H	T	U
	5	6	8	4
+	4	9	1	3
1	0	5	9	7

carried numbers should be written below in a smaller size

I can subtract two numbers (with 4 or more digits) using column subtraction.

e.g. 82491 – 1682 = ?

when borrowing, the number should be crossed out with a diagonal line; the new number should be smaller and written above and to the left

	Th	Th	H	T	U
	8	2	4	9	1
–		1	6	8	2
	8	0	8	0	9

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Year 5 Calculation Policy

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I can multiply a four digit number with a two digit number using expanded long multiplication.

Step 1: Lay out

Step 2: Calculate

Step 3: Total

	Th	H	T	U
		8	5	4
x			1	6
	5	1 3	2 1	4
	8	5	4	0
1	3	6	6	4

I can divide numbers (up to 4 digits) by a 1 digit number using short division and give an appropriate remainder (e.g. decimal/fraction/remainder)

Step 1: Lay out and calculate

	0	2	7	0	r 3
4)	1	1 0	2 8	3	

carry the remainder

Step 2: find an appropriate remainder

... 0.75
... 3.30 20

... $0\frac{3}{4}$

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Year 6 Calculation Policy

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Success for all

I can add a range of numbers together using column addition.

e.g. 148.62 + 99.9 = ?

	H	T	U.	t	h
	1	4	8.	6	2
+		9	9.	8	
	2	4	8.	4	2

line up the numbers according to place value

carried numbers should be written below in a smaller size

I can subtract a number from another number using the most appropriate method

(a simpler method such as a number line may be more appropriate at times).

e.g. 824.91 – 168.2 = ?

	H	T	U.	t	h
	~~7~~	~~8~~	~~2~~	4.	9 1
−	1	6	8.	2	0
	6	5	6.	7	1

when borrowing, the number should be crossed out and replaced with a smaller number

I can multiply numbers using the most appropriate method.

e.g. 12 x £4.20 = ?

	T	U.	t	h
		4.	2	0
x	1	2		
		8.	4	0
	4	2.	0	0
	5	0.	4	0

put the number with the most amount of digits to the top

I can divide numbers using long division.

e.g. 81344 ÷ 32 = ?

	3 2	①
+	3 2	
	6 4	②
+	3 2	
	9 6	③
+	3 2	
1	2 8	④
	3 2	
1	6 0	⑤

```
      0 2 5 4 2
   ---------------
32 ) 8 1 3 4 4
     6 4
     -----
     1 7 3
     1 6 0
     -----
     0 1 3 4
       1 2 8
       -----
           6 4
           6 4
           ---
           0
```

Write out multiplication facts using column addition