

Frimley C of E School

Progression in Calculations

- Subtraction -

Column Method (compact)

$$638 - 452 =$$

$$\begin{array}{r} 5\overset{1}{6}38 \\ +452 \\ \hline 186 \end{array}$$

Column Method (expanded)

$$346 - 154 =$$

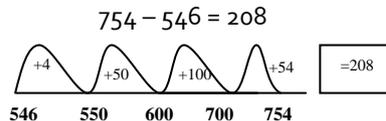
	H	T	U	
	3	4	6	
	2	0	0	
-	1	0	0	
	1	0	0	
		9	0	
		2		
				= 192

Partitioning in columns (without crossing the barrier)

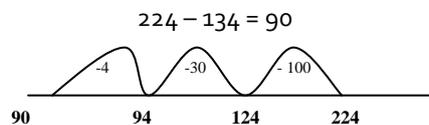
$$357 - 124 =$$

	H	T	U	
	3	5	7	
-	1	2	4	
	2	3	3	
		3	3	
				= 233

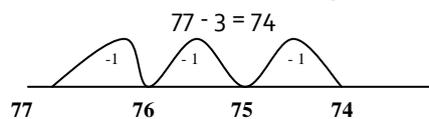
Finding the difference on a number line (counting up)



Partitioning one number on an empty number line



Counting back in ones or tens on a number line or hundred square



Taking away from a number (1-10)

Use equipment to physically take away (fingers included) from the biggest number

$$\begin{array}{c} \color{green}\blacksquare \color{green}\blacksquare \color{green}\blacksquare \\ \color{green}\blacksquare \color{green}\blacksquare \end{array} - \begin{array}{c} \color{red}\blacksquare \color{red}\blacksquare \\ \color{red}\blacksquare \color{red}\blacksquare \end{array} = 1$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

When a unit, ten or hundred is bigger than the number it is being subtracted from, remember to exchange.
1 hundred = 10 tens

Partition both numbers and arrange into columns. Start subtracting from the units column.

PROGRESSION
TU - TU
HTU - TU
HTU - HTU

Remember to start with the biggest number first!

PROGRESSION
Start with TU - TU
HTU - TU
HTU - HTU
-Continue by crossing the 10's or 100's barrier.

Associated vocabulary

Subtract
Take away
Minus
Find the difference
Decrease
How many less
Remove
Spend

PROGRESSION
Extend to decimals (money) and numbers with a different number of decimal places.

When a unit, ten or hundred is bigger than the number it is being subtracted from, you exchange from the next column.

PROGRESSION
Two columns crossing the barrier

Count on from the smallest number to make the nearest 10, nearest 100, then the target number. Add up each step to find the total!

PROGRESSION
Crossing the tens/hundreds barrier

NOTE
Children need to understand that subtraction is taking away but can also be completed by counting up!

Remember to start with the biggest number first!

PROGRESSION
-Counting back in ones
-Counting back in tens (20 + 30)
-Counting back in tens (24 + 20)
-Counting back in hundreds