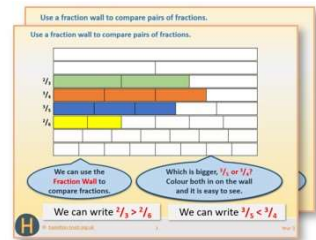


Year 5: Week 4, Day 2

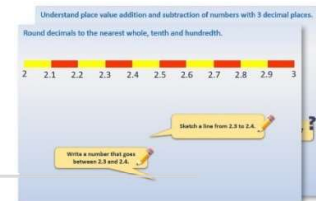
Written subtraction (1)

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



OR start by carefully reading through the **Learning Reminders**.



2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.

Place value addition and subtraction	
1. $4.538 + 0.2$	2. $4.538 + 0.03$
3. $4.538 - 0.004$	4. $4.538 - 0.02$
5. $6.231 + 0.11$	6. $6.231 + 0.101$
7. $6.231 + 0.011$	8. $5.846 - 0.211$
9. $5.846 - 0.13$	10. $5.846 - 0.013$
11. $5.846 - 0.204$	12. $4.789 - 0.001$

Challenge:
 Start at 4.532.
 Add tenths and hundredths to make an addition chain ending with the number 4.627.
 Start at 10.165.
 Subtract tenths, hundredths and thousandths to make a subtraction chain ending with the number 9.782.

3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**

Decide the decimal

What to do:
 - Draw a decimal wall with 10 columns.
 - Write the numbers 0.1 to 0.9 in the columns.
 - Draw a decimal wall with 10 columns.
 - Write the numbers 0.1 to 0.9 in the columns.
 - Draw a decimal wall with 10 columns.
 - Write the numbers 0.1 to 0.9 in the columns.

Problem	Answer
1. $0.1 + 0.2$	
2. $0.3 + 0.4$	
3. $0.5 + 0.6$	
4. $0.7 + 0.8$	
5. $0.9 + 0.1$	
6. $0.2 + 0.3$	
7. $0.4 + 0.5$	
8. $0.6 + 0.7$	
9. $0.8 + 0.9$	
10. $0.1 + 0.9$	
11. $0.2 + 0.8$	
12. $0.3 + 0.7$	
13. $0.4 + 0.6$	
14. $0.5 + 0.5$	

A Bit Stuck?
 Write numbers in the wall or on a decimal wall to make a number with three decimal places.
 Write numbers in the wall or on a decimal wall to make a number with four decimal places.
 Write numbers in the wall or on a decimal wall to make a number with five decimal places.

4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation...**

Learning Reminders

Use decomposition to subtract pairs of 5-digit numbers.

$$\begin{array}{r} 86072 \\ - 32537 \\ \hline \end{array}$$

Can you spot where a 10, 100, 1000 or 10,000 will have to be moved?

The 'top' number has a zero so we will definitely have to move a 1000 to the 100s column. A 10 will also need to be moved into the ones column as 2 is less than 7.

		5000	1000	60	12
80,000	6000	0	70	2	
- 30,000	2000	500	30	7	
<hr/>					
50,000	3000	500	30	5	
 <u>53,535</u>					

	5	10	6	12
8	0	0	7	2
- 3	2	5	3	7
<hr/>				
5	3	5	3	5

Learning Reminders

Use decomposition to subtract pairs of 5-digit numbers.

Use either expanded or compact decomposition to calculate $40,178 - 35,423$.

$$40,178 - 35,423 = 4755$$

We have 100 – 400 but don't have any 1000s that we can move!
We first need to move 10,000 from the 10,000s column...

$$40,178 - 35,423$$

	9000				
30,000	10,000	1100			
40,000	0	100	70	8	
- 30,000	5000	400	20	3	
0	4000	700	50	5	
	<u>4755</u>				

	9				
3	10	11			
4	0	1	7	8	
- 3	5	4	2	3	
	4	7	5	5	

Learning Reminders

Use decomposition or counting up to subtract pairs of 5-digit numbers.

$$\begin{array}{r} 30008 \\ - 25783 \\ \hline \end{array}$$

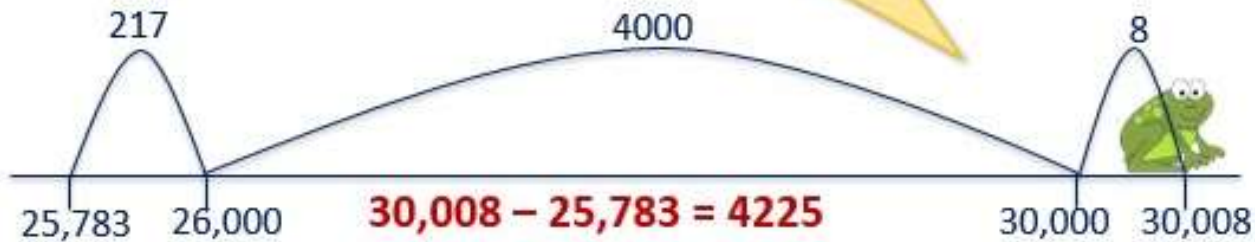
What moves would be necessary for this subtraction?

We would have to move a 10,000 to the 1000s, then a 1000 to the 100s and then a 100 to the 10s!

When we have this many moves to make, using Frog (counting up) would probably be a less error-prone strategy!

Frog is using the pair to 1000 to make the first hop.

Where will Maths Frog hop to next?



Much quicker with Frog!

Practice Sheet Mild

A table to show the numbers of hits on a website

Find the difference in numbers of website hits for each day.

Day of the week	am	pm	Difference in number of hits
Sunday	36,432	57,478	
Monday	19,758	24,642	
Tuesday	21,427	32,846	
Wednesday	16,375	25,342	
Thursday	18,631	26,492	
Friday	17,563	42,869	
Saturday	33,642	58,567	

Practice Sheet Hot

Subtracting pairs of 5-digit numbers

Choose the method of subtraction you use.

1. $75,369 - 35,826 =$

2. $83,580 - 26,317 =$

3. $64,329 - 32,876 =$

4. $72,463 - 48,725 =$

5. $50,756 - 38,249 =$

6. $76,371 - 24,393 =$

7. $62,341 - 46,586 =$

8. $83,036 - 34,152 =$

Challenge

Write two subtractions using 5-digit numbers. The first one should be one you would definitely do using Frog. The second should be one you would do using column subtraction. You must use all the digits 0-9 in each pair of subtractions, e.g. $71,820 - 65,349$ which is a good one for Frog!