



ANSWER SHEET



Monday -

Add Two Four Digit Numbers

STARTER:

How many different 4-digit numbers can you make out of these digits?

What is the largest number? What is the smallest number?

4 6 0 1

There are 18 possible answers:

1,046	1,064	1,406	1,460	1,604	1,640
4,016	4,061	4,106	4,160	4,601	4,610
6,014	6,041	6,104	6,140	6,401	6,410

The largest number is 6,410 and the smallest number is 1,046.

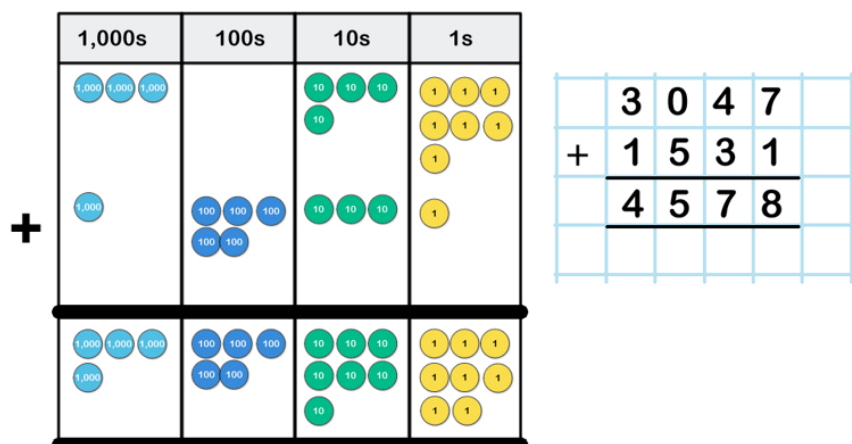
Mild

1. 687
2. $242 + 213 = 455$
3. 5455
4. 3455 - the difference is in the thousands column
5. 836
6. 800 (the digit 8)

Medium

1. 7356
- 2.

Add 3,047 and 1,531 using the column method.
Use a place-value grid and counters to model each step.



3. 7839
4. Th: 6 H:2 T:2 O: 8
5. 3878

Spicy:

1. 8073
2. 6727, 7869, 1279, 3567
3. No, the actual answer is 5827. Alex has put the number 125 in the wrong place value headings.

4.

Possible answers:

2,222 + 2,222
2,244 + 2,200
2,224 + 2,220
2,442 + 2,002
2,242 + 2,202
2,424 + 2,020
2,422 + 2,022
2,444 + 2,000

There are more possible pairs. This includes 0 as an even number. Discussion could be had around whether 0 is odd or even and why.

5.

The actual answer is 1,579
Dora's mistake was a miscalculation for the 10s column, adding 30 and 40 to get 80 rather than 70
Alex's mistake was a place value error, placing the 3 hundred in the thousands column and following the calculation through incorrectly.

Tuesday

Subtract 4 digit numbers

Mild:

1. 2342
2. 3323
3. TRUE
4. 2113, 6000, 2231, 111

Medium:

1. 3123
2. TRUE
3. 3323
4. 1415
5. 2041
6. 2120
7. 7001

Spicy:

1. 2111
2. 4612
3. 5001
4. The answer is actually 7269. The number 316 is placed under the wrong place value headings.

5.

9998 - 1100 = 8898
9998 - 1010 = 8988
9998 - 1001 = 8997
9998 - 2000 = 7998
9989 - 1100 = 8889
9989 - 1010 = 8979
9989 - 1001 = 8988
9989 - 2000 = 7989
9899 - 1100 = 8799
9899 - 1010 = 8889
9899 - 1001 = 8898
9899 - 2000 = 7899
8999 - 1100 = 7899
8999 - 1010 = 7889
8999 - 1001 = 7998
8999 - 2000 = 6999

$$3470 - 1260 = 2210$$

Possible answers include:

- two 1000s, two 100s and one 10
- twenty-two 100s and one 10
- twenty-two 100s and ten 1s

6.

Wednesday:

Starter question:

Here are some possible strategies:

USE COLUMN SUBTRACTION

COUNT ALONG A NUMBER LINE

SUBTRACT 600, THEN ADD 5

USE PLACE-VALUE COUNTERS

Mild:

1,198 1,199 1,200 1,201 1,202

The difference will stay the same because both numbers have been altered in the same way.

Here is an example: $1,600 - 300 = 1,200$

Add one to both numbers: $1,601 - 301 = 1,200$

- 1.
- 2.

a) Use column subtraction to complete the calculations.

		H	T	O	
		7	0	0	
	-	3	4	8	

		Th	H	T	O	
		6	0	0	0	
	-	2	1	4	5	

What do you notice?

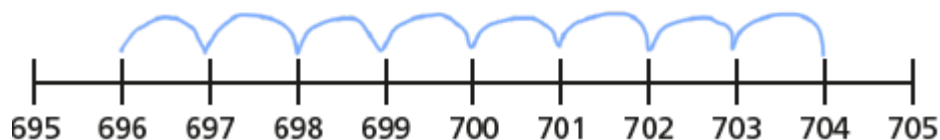
352, 3855

3.

a) Use the column method to work out $704 - 696$

		H	T	O	
		7	0	4	
	-	6	9	6	
		0	0	8	

b) Count on the number line to work out $704 - 696$



4. 485 - you may have used the column method or the counting on method
 1117 - The counting on method would be most efficient here due to the two place holders in the middle of the number which would require exchange if using the column method

Spicy:

		H	T	O	
		6	9	9	
	-	3	4	8	
		3	5	1	

$$351 + 1 = 352$$

so $700 - 348 = 352$

[illegible]

1.

		H	T	O
		7	0	0
	-	3	4	8
		3	5	2

		H	T	O	
		6	9	9	
	-	3	4	7	
		<u>3</u>	<u>5</u>	<u>2</u>	

Use Amir's method to work out $6,000 - 2,145$

$$\begin{array}{r} 5999 \\ - 2144 \\ \hline 3855 \end{array}$$

Use the column method to work out the subtractions.

a) $500 - 341$

1	5	9			

c) $£3,000 - £2,782$

£	2	1	8		

b) $1,000 - 729$

2	7	1			

d) $10,000 \text{ mm} - 7,302 \text{ mm}$

2	6	9	8	mm	

2.

Children should use the three methods demonstrated in the varied fluency section to get an answer of £545

3.

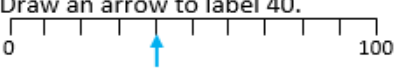
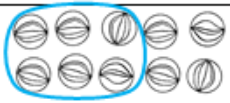
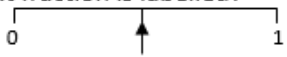
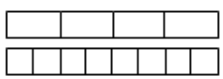
2,451 – 1,831
 Added one to each
 number.
 2,500 – 1,880
 Added 50 to both
 numbers.
 2,449 – 1,829
 Subtracted one
 from each
 number.

 The difference is
 620

4.

Thursday:

Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions	
1. What is the missing number? 0 8 24 32	3:1 16	11. $36 \div 3 =$	3:10 12
2. What is the 2 worth in this number? 257	3:2 200 (hundreds)	12. $8 \times 3 =$	3:10 24
3. Put these in order, smallest first. 293 329 932 392	3:3 293, 329, 392, 932	13. Use $5 \times 6 = 30$ to solve: $300 \div 6 =$	3:11 50
4. Draw an arrow to label 40. 	3:4 Arrow	14. Eggs come in boxes of 6. I need 20 eggs. How many boxes should I buy?	3:12 4
5. Circle all the multiples of 8. 6 <u>8</u> 14 <u>16</u> 20	3:5 8, 16	15. What fraction is shaded? 	3:13 $\frac{1}{10}$
6. $462 + 100 =$	3:6 562	16. Circle $\frac{3}{5}$ of the marbles. 	3:14 6
7. $256 + 128 =$	3:7 384	17. What fraction is labelled? 	3:15 $\frac{1}{2}$
8. Write the sum to check $82 - 37 = 45$. Check: $45 + \square = \square$	3:8 37, 82	18. $\frac{1}{4} = \frac{?}{8}$ 	3:16 2
9. To a no. I add 27 then subtract 19. I now have 13. What did I start with?	3:9 5	19. Subtract the fractions. $\frac{7}{8} - \frac{3}{8}$	3:17 $\frac{4}{8}$
10. What is the missing number? $149 + \square = 211$	3:9 62	20. Write the largest fraction. $\frac{2}{5} \frac{1}{5} \frac{4}{5} \frac{3}{5}$	3:18 $\frac{4}{5}$

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions																
1. What is the missing number? 14 28 35 42	4:1 21	11. $7 \times 12 =$	4:9 84															
2. What is the missing number? 36 42 48 60	4:1 54	12. Complete the sum that is equal to $24 \times 11:$ $2 \times$ $\times 11$	4:10 12															
3. Round this number to the nearest 10: 2,167	4:2 2,170	13. $95 \times 8 =$	4:11 760															
4. Round this number to the nearest 100: 1,543	4:2 1,500	14. One wooden block is 6cm tall. If 12 blocks are piled up, how tall are they?	4:12 72cm															
5. What is the next number in this sequence: 4, 3, 2, 1, 0,	4:3 -1	15. $\frac{1}{5} = \frac{?}{20}$ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>																4:13 4
6. Write < or > to make this correct: 1782 2817	4:4 <	16. To share a number into hundredths you divide it by .	4:14 100															
7. What number does this Roman Numeral represent? LX	4:5 60	17. $\frac{12}{9} - \frac{7}{9}$	4:15 $\frac{5}{9}$															
8. $2,725 + 834 =$	4:6 3,559	18. Write $\frac{1}{10}$ as a decimal number.	4:16 0.1															
9. Estimate the answer to: $6,504 - 4,478$	4:7 2,000	19. What is the value of the 7 in: 1.72	4:17 $\frac{7}{10}$															
10. A pet mouse weighed 65g. Its weight doubled. How heavy is it now?	4:8 130g	20. Put these heights in order, smallest first: 1.4m 1.18m 1.22m	4:18 1.18, 1.22, 1.4															

Friday -Challenges (from the bite size website)