

This week we're going to be recapping our knowledge on the four operations (+ - ÷ x) and then applying this knowledge to problem solve.

Monday – addition

1. Complete these addition questions.

1

$$\begin{array}{r} 4078 \\ + 7806 \\ \hline \\ \hline \end{array}$$

2

$$\begin{array}{r} 3020 \\ + 7033 \\ \hline \\ \hline \end{array}$$

3

$$\begin{array}{r} 8389 \\ + 2094 \\ \hline \\ \hline \end{array}$$

4

$$\begin{array}{r} 1938 \\ + 8398 \\ \hline \\ \hline \end{array}$$

5

$$\begin{array}{r} 8784 \\ + 9969 \\ \hline \\ \hline \end{array}$$

6

$$\begin{array}{r} 8580 \\ + 1887 \\ \hline \\ \hline \end{array}$$

7

$$\begin{array}{r} 9771 \\ + 8489 \\ \hline \\ \hline \end{array}$$

8

$$\begin{array}{r} 5602 \\ + 9250 \\ \hline \\ \hline \end{array}$$

2. Find the missing digits. Remember, always start from the ones column and make sure you're regrouping if you need to.

1

$$\begin{array}{r} 2_32 \\ + 31_2 \\ \hline _28_ \\ \hline \end{array}$$

2

$$\begin{array}{r} 96_ \\ + 6_80 \\ \hline _ _ 197 \\ \hline \end{array}$$

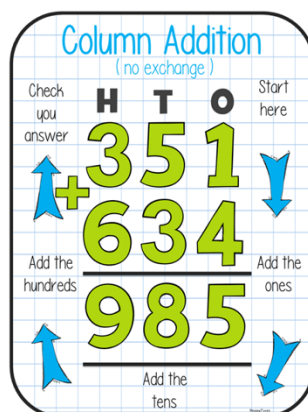
3

$$\begin{array}{r} 25_7 \\ + _39_ \\ \hline 7_65 \\ \hline \end{array}$$

4

$$\begin{array}{r} 8_2_ \\ + _060 \\ \hline _08_1 \\ \hline \end{array}$$

3. Create a step by step guide on how to add using column method for a Y2 child. E.g.



Tuesday – subtraction

1. Complete these subtraction questions.

$$\begin{array}{r} 1 \quad 7894 \\ - 3918 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 7425 \\ - 6773 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 9882 \\ - 6443 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 6746 \\ - 5816 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 6873 \\ - 5175 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 7043 \\ - 5878 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 7861 \\ - 7200 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 9803 \\ - 1985 \\ \hline \\ \hline \end{array}$$

2. Find the missing digits. Remember, always start from the ones column and make sure you're exchanging if you need to.

$$\begin{array}{r} 1 \quad 9_45 \\ - _5_6 \\ \hline 171_ \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 26_5 \\ - 1_6_ \\ \hline _368 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad _5_7 \\ - 2_2_ \\ \hline 4971 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 2_8 \\ - _63_ \\ \hline 1075 \\ \hline \end{array}$$

3. Answer these word problems. They use a mixture of addition and subtractions – not just subtraction! Use RUCSAC to help you (read, understand/underline, choose, solve, answer, check).

- a. Mr Green drives a lorry. Last week he drove 197 miles, 232 miles and 164 miles on his 3 journeys. This week he drove 309 miles and 265 miles on his 2 journeys.
What was the difference in mileage between this week and last week?

- b. Over the weekend, Paulina spends 85 minutes on her project and 45 minutes on her maths homework. On Monday, she spends 65 minutes on her spelling and grammar homework.

Explain how you would work out how much longer she spends on her homework over the weekend. Can you find more than one method?

Wednesday – multiplication

1. Complete these multiplication questions.

$$\begin{array}{r} 5249 \\ \times 61 \\ \hline \end{array}$$

$$\begin{array}{r} 5156 \\ \times 61 \\ \hline \end{array}$$

$$\begin{array}{r} 8839 \\ \times 94 \\ \hline \end{array}$$

$$\begin{array}{r} 5847 \\ \times 76 \\ \hline \end{array}$$

$$\begin{array}{r} 5456 \\ \times 22 \\ \hline \end{array}$$

$$\begin{array}{r} 9669 \\ \times 99 \\ \hline \end{array}$$

$$\begin{array}{r} 2151 \\ \times 75 \\ \hline \end{array}$$

$$\begin{array}{r} 8279 \\ \times 72 \\ \hline \end{array}$$

2. Find the missing digits. Remember, always start from the ones column and make sure you're exchanging if you need to.

$$\begin{array}{r} 1. \quad \quad 95_3 \\ \times \quad \quad _6 \\ \hline \quad 57558 \\ 287790 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \quad 2_1_ \\ \times \quad \quad 26 \\ \hline \quad 15672 \\ 52240 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad \quad 15_3 \\ \times \quad \quad 6_ \\ \hline \quad 13617 \\ 90780 \\ \hline \end{array}$$

3. Try this multiplication reasoning problems.

Miranda chooses five digit cards from a set.



Use the cards to complete a 3-digit x 2-digit multiplication and find:

- the greatest product possible _____
- the smallest product possible _____
- a product which is a multiple of 10 _____

x				

x				

x				

Thursday – division

1. Complete these division questions. The first 3 questions do not have remainders, the second 3 questions do.

26 2, 2 3 6

65 7, 6 7 0

49 | 5, 2 4 3

73 6, 7 8 1

24 2, 4 0 7

50 | 4, 2 8 0

2. Find the missing digits. Remember, always start from the ones column and make sure you're exchanging if you need to.

2.

$$\begin{array}{r}
 \begin{array}{r} \square \end{array} 6 \overline{) \begin{array}{r} 3 \square 9 \square \\ 2 \square \\ \hline 1 \square 9 \\ 1 \square 4 \\ \hline \end{array}} \\
 \begin{array}{r} 5 \square \\ 5 \square \\ \hline \end{array}
 \end{array}$$

	2	3	7
4		9	
	8		
	1		
	1		
			4
			4

3. Try the division reasoning problem.

- 1) A glass can hold 24ml of juice. Emily is trying to work out how many glasses can be filled from the 312ml of juice left in the carton.

She uses this calculation to solve the problem:

		1	3	0
2	4	3	1	2

Explain why Emily's calculation is incorrect.

Friday – all four operations

1. Try these reasoning problems that use all four operations.

1. Baked beans are sold individually (75p), in packs of 4 (£2.69) and packs of 6 (£3.85). What is the cheapest way to buy 12 tins of baked beans?

The 4-pack is on offer at £2. How much can be saved in buying 12 tins in packs of 4?

With the offer price, how much is saved per tin buying a 4-pack rather than 4 individual tins?



2. A large box of pencils costs £360. In each box there are 100 packets of pencils, each with 12 pencils.

How much does each pencil cost?

What cost would be found by calculating $£360 \div 12$?



2. Can you design (or make!) a boardgame where players have to use the four operations to get round the board.

For example, a Monopoly game where a community chest card gave you a problem to solve.

Or Snakes and Ladders where you didn't have to go down the snake if you solved a problem correctly.

3. Write the missing numbers.

$$90 \div \square = 4.5$$

$$\square \times 30 = 1050$$

$$\square + 630 = 1600$$

$$243 - \square = 160$$

$$\square \div 40 = 40$$

$$\square \times 100 = 2800$$

$$19\,800 + \square = 23\,200$$

$$17 - \square = -18$$