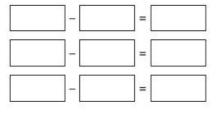**Monday 6th July 2020   Y4 Maths**

Hello Y4s, I hope you have had a lovely weekend. Here is your maths for today. Follow the link https://vimeo.com/430335306 and watch the teaching video **'Estimating answers'** and try the questions below.

Estimate answers

1 Filip is working out 607 + 395

He rounds his numbers to the nearest hundred to estimate the answer.

a) Complete the sentences.

607 rounded to the nearest hundred is [ ]

395 rounded to the nearest hundred is [ ]

Filip's estimate for the answer is

[ ] + [ ] = [ ]

b) Use column addition to work out the actual answer.

	Th	H	T	O
		6	0	7
+		3	9	5

The actual answer is [ ]

2 Alex is working out 7,958 – 6,103

Alex rounds her numbers to the nearest thousand to estimate the answer.

a) Complete the sentences.

7,958 rounded to the nearest thousand is [ ]

6,103 rounded to the nearest thousand is [ ]

Alex's estimate is

[ ] – [ ] = [ ]

b) Use column subtraction to work out the actual answer.

	Th	H	T	O
	7	9	5	8
–	6	1	0	3

The actual answer is [ ]

3 Mr Howell writes a subtraction on the board.

795 – 503

I estimate the answer will be close to 200 because 700 – 500 = 200

What mistake has Dora made?

Write a better estimate.

_____

_____

4 a) Tom is estimating an addition calculation.

His estimate is 3,000 + 1,000 = 4,000

Write three possible additions Tom could be estimating.

[ ] + [ ] = [ ]

[ ] + [ ] = [ ]

[ ] + [ ] = [ ]

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Remember- Estimating is a very useful skill to develop - it helps you to spot careless errors when your answer, after using a calculation method, is much larger or smaller than your estimated answer.

Challenge on last page

b) Dani is estimating a subtraction calculation.

Her estimate is £600 – £100 = £500

Write three possible subtractions Dani could be estimating.

☐ – ☐ = ☐

☐ – ☐ = ☐

☐ – ☐ = ☐

5 Complete the table. Show your workings.

Question	Estimated answer	Accurate answer
3,970 km – 1,850 km		
7,076 – 852		
7,076 – 652		
1,994 ml + 1,994 ml		

6 Whitney and Dexter are estimating the answer to 2,706 – 1,394

Whitney's estimate is 3,000 – 1,000 = 2,000

Dexter's estimate is 2,700 – 1,400 = 1,300

Whose estimate is more accurate? Why?

_____

_____

7 A forest has 2,638 trees.

1,172 more trees are planted.

a) Use rounding to estimate the number of trees in the forest now.

☐

b) Work out the actual number of trees in the forest.

☐

c) How accurate was your estimate?

Challenge – you will need to find someone at home to play this with you.

Four Go

Age 7 to 11 ★★

Draw a number line on a piece of paper, marked from 0 to 20, like this:

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

(You could print off this sheet which has several number lines drawn on it.)

This challenge is a game for two players. The first player chooses two numbers in this grid and either multiplies or divides them.

100	25	5
10	2	36
12	4	3

÷

×

He or she then marks the answer to the calculation on the number line. The second player then chooses two numbers and either multiplies or divides them and marks that number in a different colour on the number line.

If the answer is too big or too small to be marked on the number line, the player misses a go.

The winner is the player to get four marks in a row with none of their opponent's marks in between.

Good luck

Estimate answers

1 Filip is working out 607 + 395

He rounds his numbers to the nearest hundred to estimate the answer.

a) Complete the sentences.

607 rounded to the nearest hundred is [600]

395 rounded to the nearest hundred is [400]

Filip's estimate for the answer is

[600] + [400] = [1,000]

b) Use column addition to work out the actual answer.

Th	H	T	O
	6	0	7
+	3	9	5
1	0	0	2

The actual answer is [1,002]

2 Alex is working out 7,958 – 6,103

Alex rounds her numbers to the nearest thousand to estimate the answer.

a) Complete the sentences.

7,958 rounded to the nearest thousand is [8,000]

6,103 rounded to the nearest thousand is [6,000]

Alex's estimate is

[8,000] – [6,000] = [2,000]

b) Use column subtraction to work out the actual answer.

Th	H	T	O
7	9	5	8
– 6	1	0	3
1	8	5	5

The actual answer is [1,855]

3 Mr Howell writes a subtraction on the board.

795 – 503

I estimate the answer will be close to 200 because
700 – 500 = 200

What mistake has Dora made?

Write a better estimate.

795 rounds to 800 not 700

800 – 500 = 300

4 **a)** Tom is estimating an addition calculation.

His estimate is 3,000 + 1,000 = 4,000

Write three possible additions Tom could be estimating.

E.g.

2,999 + 999 = 3,998

3,076 + 1,200 = 4,276

2,621 + 1,334 = 3,955

b) Dani is estimating a subtraction calculation.

Her estimate is £600 – £100 = £500

Write three possible subtractions Dani could be estimating.

E.g.

£601 – £107 = £494

£649 – £130 = £519

£550 – £72 = £478

5 Complete the table. Show your workings.

Question	Estimated answer	Accurate answer
3,970 km – 1,850 km	2,000km	2,120km
7,076 – 852	6,000	6,224
7,076 – 652	6,000	6,424
1,994 ml + 1,994 ml	4,000mL	3,988mL

6 Whitney and Dexter are estimating the answer to 2,706 – 1,394

Whitney's estimate is 3,000 – 1,000 = 2,000

Dexter's estimate is 2,700 – 1,400 = 1,300

Whose estimate is more accurate? Why?

Dexter's because he has rounded to the nearest 100

7 A forest has 2,638 trees.

1,172 more trees are planted.

a) Use rounding to estimate the number of trees in the forest now.

[3,800]

b) Work out the actual number of trees in the forest.

[3,810]

c) How accurate was your estimate?