13.1.21

Arithmetic

1. 431 + 1,205
2. 1,237 - 381
3. 678 - 89
4. 28x13
5. 1,378 ÷ 3
6. 4^3

FB4

Flashback 4 — Year 6 | Week 1 | Day 5

1) What is 36 ÷ 10?

2) What is the value of the digit 2 in the number 17.243?

3) Work out $1\frac{2}{5} + \frac{3}{4}$

4) Max has £1,500. He spends £279 on a new TV. How much does he have left?

Barvember

BARVEMBER — Wednesday 21 November 2018 — White Rose Maths

1 Maz and Tom have 20 stickers altogether.
Maz has 8 stickers.
How many more stickers does Tom have than Maz?

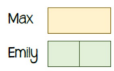
2 Sophie has twice as many grapes as Fred.
Sophie gives a quarter of her grapes to Fred.
How many more grapes does Sophie now have than Fred?

Barvember

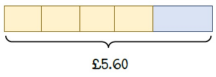
BARVEMBER — Wednesday 21 November 2018 — White Rose Maths

3 Max and Emily each think of a number.
- $\frac{1}{3}$ of Max's number is equal to $\frac{2}{5}$ of Emily's number.
- The difference between Max's number and Emily's number is 14

What number is Max thinking of?



4 A ruler and 4 pencils cost £5.60
A ruler costs 85p more than a pencil.
How much does a pencil cost?



13.1.21 Multiply decimals by integers

Vocabulary

- tenths
- hundredths
- thousandths
- place value
- column
- multiplication
- integer
- decimal
- zero

13.1.21 Multiply decimals by integers

Today we are learning to multiply decimal numbers by integers.

I will be successful if:

- I identify the value of the place value column
- I identify the number of decimal places in my number.
- I recognise 0 when it is used as a place holder.
- I multiply individual calculations accurately.

What would happen if we multiplied by a different whole number (an integer)?

2.3 x 3

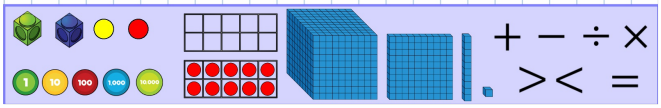
We could use repeated addition

2.3 x 3 = 6 . 9

Thsat method could become complicated for larger numbers.

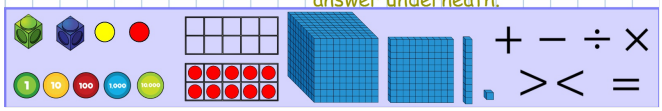
Let's look at our method for multiplication of integers

$$\begin{array}{r} 2\,4 \\ \times\ 3\,1 \end{array}$$



$$\begin{array}{r} 2\,4 \\ \times\ 3\,1 \\ \hline 2\,4 \\ 7_1\,2\,0 \\ \hline 7\,4\,4 \end{array}$$

1. Multiply 1 by 4
2. Record the answer underneath
3. Multiply 1 by 2
4. Record the answer underneath.
5. We will multiply the top row by 3 but first we need to put a place holder (as we aren't multiplying by 3 but by 30.)
6. Multiply 3 by 4 (this makes 12, so put the two underneath and carry over a little 1.
7. Multiply 3 by 2 (and add the little 1)and record the answer underneath.
8. Add up the numbers.



For 2.6 x 4 we can complete the multiplication for 26 x 4 and then put the decimal places in at the end. (2.6 has one decimal place, so our answer needs one decimal place.)

Decimal place = how many numbers after the decimal point.

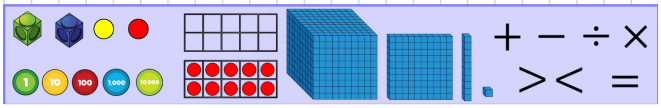
$$\begin{array}{r} 2\,6 \\ \times\ \ \ 4 \\ \hline 1\,0_2\,4 \end{array}$$

= 10.4

4x2 = 8 (but we need to add the little 2 to make 10)

We now need to put the deciaml places in as out answer is 10 x bigger than it should be (as we made 2.6 ten times bigger)

One decimal place



What if we had two decimal places?
e.g. 2.43 x 5

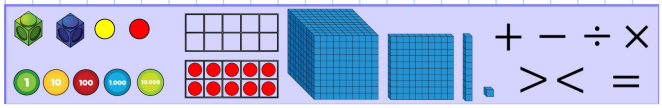
$$\begin{array}{r} 2\,4\,3 \\ \times\ \ \ \ \ 5 \\ \hline 1\,2_2\,1_1\,5 \end{array}$$

1 2 1 5

12.15

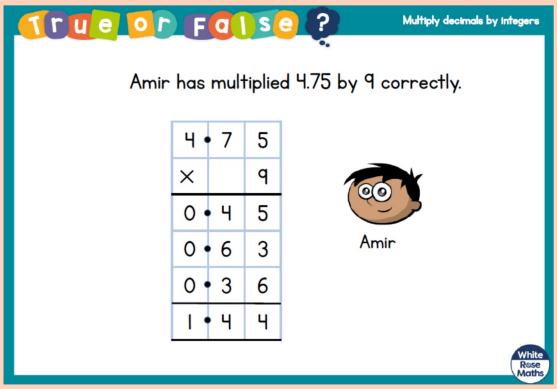
Multiplying just the whole numbers can give us an estimate of the number. (e.g. 2 x 5 = 10, so the number will be near 10 and not 100 etc.

2.43 had two decimal places, so 1215 needs two decimal places



13.1.21 Multiply decimals by integers

Complete A, B or C

A	B	C
1. 3.4 x 2	1. 1.6 x 4	1. 7.8 x 6
2. 2.3 x 3	2. 2.13 x 3	2. 4.9 x 7
3. 2.4 x 4	3. 2.24 x 4	3. 6.28 x 4
4. 1.5 x 3	4. 1.31 x 6	4. 3.42 x 7
5. 2.7 x 3	5. 1.26 x 5	5. 4.29 x 8
6. 1.6 x 4	6. 4.54 x 3	6. 6.4 x 11
7. 1.12 x 3	7. 6.28 x 4	7. 3.12 x 12
8. 2.13 x 3	8. 3.42 x 7	8. 4.28 x 12
9. 2.24 x 4	9. 4.29 x 8	9. 7.63 x 14
10. 1.31 x 5	10. 6.4 x 11	10. 8.91 x 23
11. 1.26 x 5	11. 3.12 x 12	11. 3.94 x 21
12. 4.54 x 3	12. 4.28 x 12	12. 7.62 x 27

13.1.21 Plenary