20.4.21   Decimals

Learning Objective:
We are learning to add decimals with the same number of decimal places

I will be successful if:
- I can add numbers greater than one.
- I can use place value grids to explain my method.
- I can line up the decimal points when using the column method.

Key Vocabulary

place value
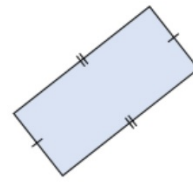decimal places
ones
tenths
hundredths
thousandths
value
digit
partition

1)   Add 0.45 to 0.85

2)   What is 0.05 less than 0.71?

3)   Which percentage is the same as $\frac{3}{5}$?

     3.5%   30%   35%   60%

4)   How many sides does a hexagon have?

White Rose Maths

<u>Challenge</u> - Write these measurements as decimals.
5) 3 1/4 litres
6) 10 and 1/2 cm
7) 4 4/5m
8) 12 3/4 kg
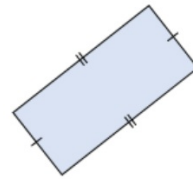
1) Add 0.45 to 0.85 — 1.3(0)

2) What is 0.05 less than 0.71? — 0.66

3) Which percentage is the same as $\frac{3}{5}$?

   3.5%   30%   35%   60%   60%

4) How many sides does a hexagon have? — 6

White Rose Maths

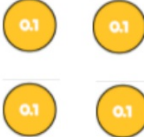*Challenge* - Write these measurements as decimals.
5) 3 1/4 litres = 3.25l
6) 10 and 1/2 cm = 10.5cm
7) 4 4/5m = 4.8m
8) 12 3/4 kg = 12.75kg

Use the place value grid to help you add these decimals

Ones		Tenths	Hundredths
1 1 1	•	0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01
1 1 1 1	•	0.1	0.01 0.01 0.01 0.01

```
  3 . 4 5
+ 4 . 1 4
_____

_____
```

Use the column method to solve these additions.

```
    4 . 4 2          4 . 5 5
+ 7 . 6 3        + 3 . 0 7
  _____          _____

  _____          _____
```

What happens when the total of a column is 10 or more?

Ron goes to the shops. He buys 3 items. What is the most he could pay? What is the least he could pay?

⚽	🐼	🚂	🏉
£4.45	£5.59	£3.99	£4.05

To find the sum of 2.38 and 3.84 more than one exchange will be needed.

Ones	Tenths	Hundredths
1 1	0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
1 1 1	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01

White Rose Maths

20.4.21

Adding decimals with the same number of decimal places

Reasoning challenges

$$+ 0.2$$

$$3.2 + 2.8 = 3 + 3$$

$$- 0.2$$

$$+ 0.18$$

$$3.18 + 2.82 = 3 + 3$$

$$- 0.18$$

Using these strategies, can you find more number sentences which have the same total as $3 + 3$

$$+ \quad \boxed{}.\boxed{}\boxed{}$$
$$\quad \boxed{}.\boxed{}\boxed{}$$

Using the digits 0 – 9 only once in each of the spaces above, what is:
- The largest sum possible
- The smallest sum possible

Is there more than one way of creating each total?