

Maths

W.b. 22nd February 2021

Year 5 Home Learning
Wibsey Primary School

Place value grid

Millions			Thousands			Units				Decimals				
		One Millions 1 000 000	Hundreds of Thousands 100 000	Tens of Thousands 10 000	One Thousands 1 000	Hundreds 100	Tens 10	Units 1	Decimal Point	Tenths $\frac{1}{10}$ 0.1 or	Hundredths $\frac{1}{100}$ 0.01 or	Thousandths $\frac{1}{1000}$ 0.001		
									•					
									•					
									•					
									•					
									•					
									•					
									•					

← Multiply

Divide →

Monday 22nd February

Complete the questions

I can multiply whole and decimal numbers by 10,100 and 1000

BLP – Capitalising 2

Fluency

Use the place value tables to multiply these numbers by 10 and 100:

a	Th	H	T	O	×
			1	5	
					10
					100

b	Th	H	T	O	×
			4	8	
					10
					100

Fluency – See if you can challenge yourself to work out the answer independently, then use the place value grids to check your answers.

1. $145 \times 10 =$
2. $4589 \times 10 =$
3. $859 \times 1000 =$
4. $548 \times 100 =$
5. $8940 \times 100 =$
6. $748 \times 1000 =$

Fluency – Use the place value grids, but see if you can challenge yourself to try at least one question by yourself!

7. $13.4 \times 10 =$
8. $0.7 \times 10 =$
9. $19.2 \times 100 =$
10. $0.48 \times 100 =$
11. $19.3 \times 1000 =$
12. $74.2 \times 10 =$
13. $987.3 \times 100 =$
14. $8.43 \times 1000 =$

HOTS

Ayaan has multiplied a number by 100. His answer is between 40 and 45. What number could he have multiplied? How many different numbers could it be?

Monday 22nd February – CHALLENGE QUESTIONS

Use a place value grid to multiply these decimals by 10, 100 and 1,000

4.24

2.401

42.1

Complete the table below.

	×10	×100	×1,000
3.14			
13			
0.233			

Multiplying by 1,000 is the same as doing $10 \times 10 \times 10$



Do you agree with Mo?
Explain your answer.

Using the digits 0-9 create a number with up to 3 decimal places, for example, 3.451

Cover the number using counters on your Gattegno chart.

10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009

Explore what happens when you multiply your number by 10, then 100, then 1,000
What patterns do you notice?

Tuesday 23rd February

Complete the questions

I can divide whole and decimal numbers by 10, 100 and 1000

BLP – Capitalising 2

Fluency

Use the place value tables to divide the numbers by 10 and 100. Don't forget your decimal point!

Tens	Ones		Tenths	Hundredths	
	4	•			
		•			÷ 10
					÷ 100

Tens	Ones		Tenths	Hundredths	
2	7	•			
		•			÷ 10
					÷ 100

Fluency – See if you can challenge yourself to work out the answer independently, then use the place value grids to check your answers.

1. $145 \div 10 =$
2. $4589 \div 10 =$
3. $548 \div 100 =$
4. $8940 \div 100 =$
5. $753 \div 1000 =$
6. $8475 \div 1000 =$

Fluency – Use the place value grids, but see if you can challenge yourself to try at least one question by yourself!

7. $13.4 \div 10 =$
8. $7 \div 10 =$
9. $19.2 \div 100 =$
10. $48 \div 100 =$
11. $74.2 \div 10 =$
12. $987.3 \div 100 =$
13. $64.4 \div 1000 =$
14. $849.3 \div 1000 =$

HOTS

Use the number cards below to fill in the missing digits. You can only use each number card once, so you might want to cross them off the sheet each time you use one.

0 ÷ 10 =

.4 × 10 = 3

8 ÷ 100 = 6

5. 2 × 100 = 7



Tuesday 23rd February – CHALLENGE QUESTIONS

Fill in the missing numbers in the diagram.



Fill in the missing numbers in these calculations.

$$34.2 \div \square = 0.342 \quad \square \div 10 = 54.1$$
$$\square \div 10 = 1.93 \div 100$$

Here are three rectangles.



The lengths of rectangle B are 10 times larger than rectangle A.
The lengths of rectangle C are 100 times smaller than rectangle B.

If you multiply a number by 1,000, you can just divide the answer by 1,000 to get back to your original number.



Whitney

That's not true, you would need to divide the answer by ten three times.



Eva

The perimeter of rectangle A is 1,000 times greater than the perimeter of rectangle C.



Do you agree with Mo?
Explain your thinking.

Who do you agree with?
Explain your thinking.

Wednesday 24th February

Complete the questions

I can compare and order decimals with three decimal places.

BLP – Noticing 4

Fluency – Rewrite the numbers below in ascending order

3	•	4
3	•	9
3	•	2
3	•	7
3	•	0

2	4	•	9
4	2	•	1
2	7	•	4
3	4	•	7
6	3	•	6

1	7	7	•	4
9	3	4	•	2
7	9	1	•	3
1	2	0	•	2
1	8	4	•	9

Fluency – Rewrite the numbers below in ascending order

- 8.49, 9.56, 1.12, 9.99, 2.65
- 12.32, 63.21, 63.12, 12.12, 24.32
- 362.24, 362.12, 256.32, 362.62, 258.14
- 1258.63, 4582.36, 4582.35, 1258.66, 9532.12

Problem Solving

- Bob has placed the numbers below in ascending order. Circle the mistake.

4.52, 4.63, 4.62, 4.65, 4.68

Can you rewrite the sequence without the mistake?

- Place a digit in each box, so the decimals are in ascending order.

2	•	4	
2	•		6
	•	5	3
3	•	0	
3	•		9

HOTS

Three children have numbers with two decimal places. They each give a clue to their number. Can you work out which clue matches to which child?

Billie	Shaukat	Nita
3.15	4.14	3.13

My number has a one in the tenths column.

My number has the same amount of ones and hundredths.

My number is the largest number.

Wednesday 24th February – CHALLENGE QUESTIONS

Use each digit card **once** to make the statement correct.



3 >

Can you find eight different possible solutions?

Spot the Mistake

Rosie is ordering some numbers in ascending order:



0.09 < 0.99 < 10.01 < 1.35 < 9.09

Can you explain her mistake?



Use three digit cards to make the greatest possible number.

Use three digit cards to make the smallest possible number.

Some children have planted sunflowers and have measured their heights.

Child	Height
Beth	1.23 m
Tony	0.95 m
Rachel	1.02 m
Kate	1.2 m
Faye	99 cm
Emma	0.97 m



Order the children based on the heights of their sunflowers in both ascending and descending order.

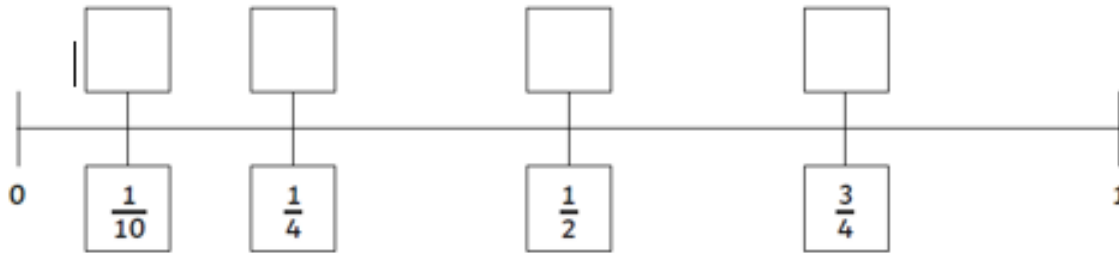
Thursday 25th February

Complete the questions

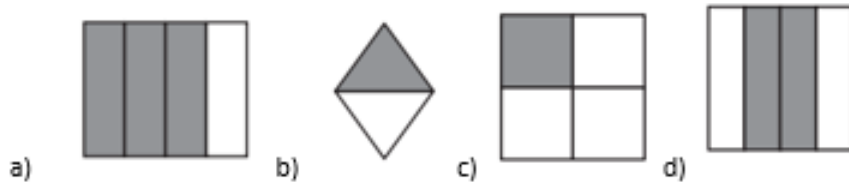
I can recognise and write decimal equivalents to: $\frac{1}{4}$, $\frac{1}{2}$; $\frac{3}{4}$

BLP-Noticing – 3.

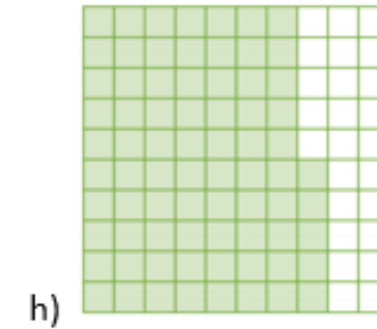
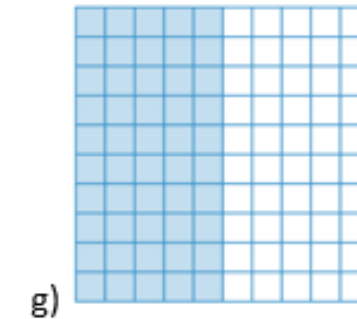
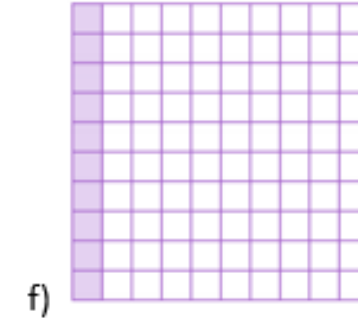
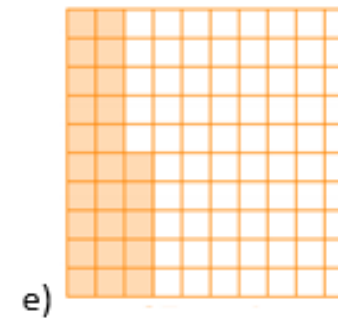
Fluency: Fill the gaps.



Fluency: Record the shaded area as a fraction and the equivalent decimal number.



Fluency: Record the shaded area of each shape as two equivalent fractions and decimal numbers.



Thursday 25th February – CHALLENGE QUESTIONS

Alex says:

If I know $\frac{1}{2}$ is 0.5 as a decimal, I also know $\frac{3}{6}$, $\frac{4}{8}$ and $\frac{6}{12}$ are equivalent to 0.5 as a decimal.

Explain Alex's thinking.

Dexter has made a mistake when converting his fractions to decimals.

$$\frac{1}{2} = 1.2, \quad \frac{1}{4} = 1.4 \text{ and } \frac{3}{4} = 3.4$$

What mistake has Dexter made?

Friday 26th February

Complete the arithmetic sheet – Week 5. This is available on the website and Google Classroom.

The answers are on the final page – no peeking!