



Date	18.01.21
Subject/s	Maths
Learning Objective 	To divide decimals by 10, 100 and 1000

SA 	TA 
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Success Criteria 	I can use a place value grid to support me.		
	I know that when dividing by 10, 100 and 1000, the digits will move 1, 2 or 3 times to the right.		
	I can use place holders when needed.		
Support	Independent	Adult Support ()	Group Work

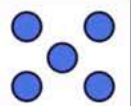


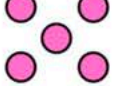

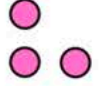
Lockdown learning: DC

Pre-task

1) Divide 3.56 by 1000.

Teacher led

Fluency

	Th	H	T	O	.	Tth	Hth
513					.		
$513 \div 10 = 51.3$					.		

When dividing by 10, the digits move one place to the right.

$\div 10 = 1$ place to the right.

$\div 100 = 2$ places to the right.

$\div 1000 = 3$ places to the right.

$$1) \quad 63.2 \div 10 = 6.32$$

10,000s	1000s	100s	10s	1s	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
			6	3	•	2		
				6	•	3	2	

$$2) \quad 2493 \div 1000 = 2.493$$

10,000s	1000s	100s	10s	1s	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
	2	4	9	3	•			
				2	•	4	9	3

When dividing by **10**, the digits move **1** place to the **right**.

When dividing by 100, the digits move 2 places to the right

When dividing by 1000, the digits move 3 places to the right

Th	H	T	O	•	Tth	Hth
	3	9	6	•		
			3	•	9	6

$$396 \div 100 = 3.96$$

Solve these calculations. What do you notice?

a) $29,302 \div 1 = 29,302$

b) $29,302 \div 10 = 2,930.2$

c) $29,302 \div 100 = 293.02$

d) $29,302 \div 1000 = 29.302$

10,000s	1000s	100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
2	9	3	0	2			
	2	9	3	0	2		

10,000s	1000s	100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
2	9	3	0	2			
		2	9	3	0	2	

10,000s	1000s	100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
2	9	3	0	2			
			2	9	3	0	2

Fluency A

1) $3972 \div 100 =$

2) $621 \div 10 =$

3) $5926.98 \div 1000 =$

4) $3.268 \div 10 =$

5) $629.35 \div 100 =$

6) $58.820 \div 1000 =$

7) $93.6 \div 10 =$

8) $6.893 \div 100 =$

9) $29.763 \div 1000 =$

	$\div 10$	$\div 100$	$\div 1000$
23.65			
58.30			
6.4			

Fluency B

1) $2.8 \div 100 =$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

2) $68.26 \div 10 =$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

3) $77.09 \div 10 =$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

$$4) \quad 52.63 \div 100 =$$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
			•			
			•			

$$5) \quad 9.73 \div 100 =$$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
			•			
			•			

$$6) \quad 739.6 \div 100 =$$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
			•			
			•			

$$7) \quad 219.6 \div 1000 =$$

100s	10s	1s	• $\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
			•			
			•			

$$8) \quad 19.3 \div 1000 =$$

100s	10s	1s	• $\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
			•			
			•			

$$9) \quad 301.9 \div 1000 =$$

100s	10s	1s	• $\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
			•			
			•			

Problem solving and reasoning:

Explain it!

Eva says,



When you divide by 10, 100 or 1,000 you just take away the zeros or move the decimal point.



Do you agree?
Explain why.

True or false?

- a) 35.7 divided by 10 = 0.357
- b) 900.6 divided by 100 = 9.006
- c) 87.342 divided by 10 = 87.342
- d) 513 divided by 1000 = 0.513
- e) 26902 divided by 100 = 296.2

Use it!



Fluency A

$$1) \quad 3972 \div 100 = 3.972$$

$$2) \quad 621 \div 10 = 62.1$$

$$3) \quad 5926.98 \div 1000 = 5.92698$$

$$4) \quad 3.268 \div 10 = 0.3268$$

$$5) \quad 629.35 \div 100 = 0.62935$$

$$6) \quad 58.820 \div 1000 = 0.058820$$

$$7) \quad 93.6 \div 10 = 9.36$$

$$8) \quad 6.893 \div 100 = 0.06893$$

$$9) \quad 29.763 \div 1000 = 0.029763$$

	$\div 10$	$\div 100$	$\div 1000$
23.65	2.365	0.2365	0.02365
58.30	5.830	0.5830	0.05830
6.4	0.64	0.064	0.0064

Fluency B

1) $2.8 \div 100 = 0.028$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
		2	8		
		0	0	2	8

2) $68.26 \div 10 = 6.826$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
	6	8	2	6	
		6	8	2	6

3) $77.09 \div 10 = 7.709$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
	7	7	0	9	
		7	7	0	9

$$4) \quad 52.63 \div 100 = 0.5263$$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
	5	2	6	3		
		0	5	2	6	3

$$5) \quad 9.73 \div 100 = 0.0973$$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
		9	7	3		
		0	0	9	7	3

$$6) \quad 739.6 \div 100 = 7.396$$

100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
7	3	9	6			
		7	3	9	6	

$$7) \quad 219.6 \div 1000 = 0.2196$$

100s	10s	1s	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
2	1	9	•	6			
		0	•	2	1	9	6

$$8) \quad 19.3 \div 1000 = 0.0193$$

100s	10s	1s	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
	1	9	•	3			
		0	•	0	1	9	3

$$9) \quad 301.9 \div 1000 = 0.3019$$

100s	10s	1s	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
3	0	1	•	9			
		0	•	3	0	1	9

Problem solving and reasoning:

Answers

Explain it!

Eva says,



When you divide by 10, 100 or 1,000 you just take away the zeros or move the decimal point.



Do you agree?
Explain why.

Eva is wrong, the decimal point never moves. When dividing, the digits move right along the place value columns.

True or false?

- a) 35.7 divided by 10 = 0.357
- b) 900.6 divided by 100 = 9.006
- c) 87.342 divided by 10 = 87.342
- d) 513 divided by 1000 = 0.513
- e) 26902 divided by 100 = 296.2

Use it!



- a) false
- b) true
- c) false
- d) true
- e) false