

Homework

Divide by 10, 100 and 1,000 – Decimals

National Curriculum Objectives:

Mathematics Year 5: (5C6b) Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Mathematics Year 5: (5F10) Solve problems involving number up to three decimal places

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Complete the calculation to state whether it is correctly represented by given counters on place value grid.

Expected Complete the calculation to state whether it is correctly represented by given place value counters. Numbers up to 3 decimal places.

Greater Depth Complete the multi-step calculation to state whether it is correctly represented by given place value counters. Numbers up to 4 decimal places.

Questions 2, 5 and 8 (Varied Fluency)

Developing Complete the calculations and match answers to the correct place value grids.

Expected Complete the calculations and match answers to the correct visual representations. Numbers up to 3 decimal places.

Greater Depth Complete the multi-step calculations and match to the correct visual or written representations. Numbers up to 4 decimal places.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Calculate possible options to explain whether a given statement is correct. With visual support.

Expected Calculate possible options to explain whether a given statement is correct. Numbers up to 3 decimal places.

Greater Depth Calculate possible options to explain whether a given statement is correct. Multi-step problem.

Divide by 10, 100 and 1,000 – Decimals

1. Does Bella have the correct counters on her place value chart to represent the answer to the following calculation?

$$1,420 \div 100$$

Th	H	T	O	Tths	Hths	Thths
			●	●● ●●	●●	



VF
HW/Ext

2. Match the calculations to the correct answer.

1.

$211 \div 100 =$

2.

$321 \div 10 =$

3.

$31 \div 100 =$

A

T	O	Tths	Hths
●●●	●●	●	

B

T	O	Tths	Hths
	●●	●	●

C

T	O	Tths	Hths
		●●●	●



VF
HW/Ext

3. Harry says,

34.4g ÷ 10 weighs more than 344g ÷ 100.

H	T	O	Tths	Hths
	●●	●●	●●	

H	T	O	Tths	Hths
●●	●●	●●	●●	



Is Harry correct? Explain your answer.

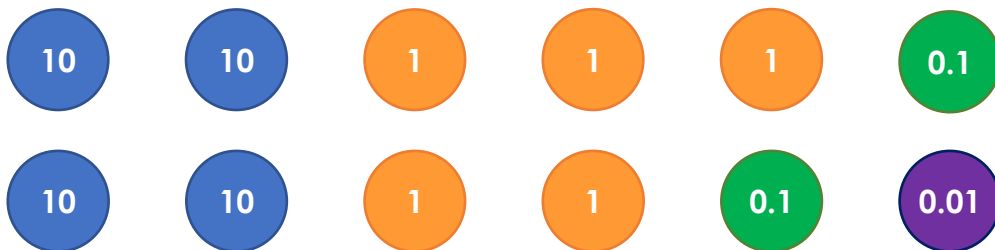


RPS
HW/Ext

Divide by 10, 100 and 1,000 – Decimals

4. Does Arlo have the correct place value counters to represent the answer to the following calculation?

$$4,521 \div 1,000$$



VF
HW/Ext

5. Match the calculations to the correct answer.

1.

$$126 \div 100 =$$

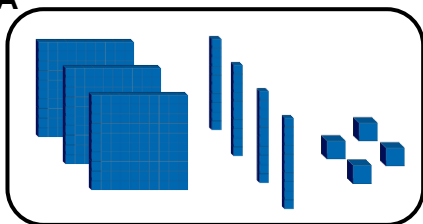
2.

$$3,440 \div 10 =$$

3.

$$2,151 \div 1,000 =$$

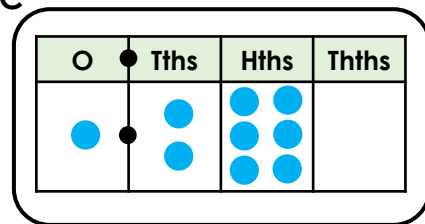
A



B



C



VF
HW/Ext

6. Angela says,

If 10 people equally share 36.12L of water, they will each have more than if 100 people equally share 3,612L of water.



Is Angela correct? Explain your answer.



RPS
HW/Ext

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7. Does Rachel have the correct place value counters to represent the answer to the following calculation?

$$6,027 \div 100 \div 100$$



VF
HW/Ext

8. Match the calculations to the correct answer.

1.

$$25,200 \div 10 \div 10 =$$

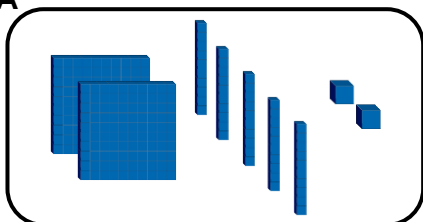
2.

$$4,866 \div 100 =$$

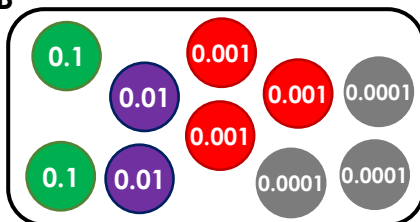
3.

$$223.3 \div 100 \div 10 =$$

A



B



C

Forty-eight ones, six tenths and six hundredths.



VF
HW/Ext

9. Lin says,

If Team A ran 141 kilometres in 100 hours and Team B ran 2,446 metres in 10 hours, then Team B ran more kilometres per hour than Team A.



Is Lin correct? Explain your answer.



RPS
HW/Ext

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Developing

1. No, the answer is 14.2 and the place value grid represents 1.42.
2. 1 = B; 2 = A; 3 = C
3. Harry is incorrect. $34.4\text{g} \div 10$ is the same weight as $344\text{g} \div 100$.

Expected

4. No, the answer is 4.521 and the counters represent 45.21.
5. 1 = C; 2 = A; 3 = B
6. Angela is incorrect. 10 people sharing 36.12L would have 3.612L each, 100 people sharing 3,612L would have 36.12L each.

Greater Depth

7. No, the answer is 0.6027 and the counters represent 6.027
8. 1 = A; 2 = C; 3 = B
9. Lin is incorrect. Team A ran 1.41km per hour ($141\text{km} \div 100$). Team B ran 0.2446 per hour ($2.446\text{km} \div 10$).