

Divide by 10, 100 and 1,000



1 Complete the calculations and sentences.

Use place value counters to help you.

Th	H	T	O	Tth	Hth
	●	●● ●●			

a) $140 \div 10 =$

When the number is divided by 10 the counters move place to the right.

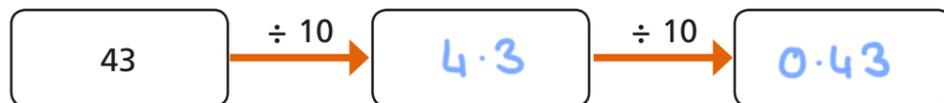
b) $140 \div 100 =$

When the number is divided by 100 the counters move places to the right.

c) $140 \div 1,000 =$

When the number is divided by 1,000 the counters move places to the right.

2 Complete the diagram.



3 a) Draw counters to represent the calculations.

$123 \div 1$

H	T	O	Tth	Hth	Thth
○	○○	○○○			

$123 \div 10$

H	T	O	Tth	Hth	Thth
○	○○	○○○			

(Handwritten: A blue box encloses the H, T, and O columns. An arrow points from the O column to the Tth column.)

$123 \div 100$

H	T	O	Tth	Hth	Thth
○	○○	○○○			

(Handwritten: A blue box encloses the H, T, and O columns. An arrow points from the O column to the Hth column.)

$123 \div 1,000$

H	T	O	Tth	Hth	Thth
○	○○	○○○			

(Handwritten: A blue box encloses the H, T, and O columns. An arrow points from the O column to the Thth column.)

b) Complete the calculations.

$123 \div 1 =$

$123 \div 10 =$

$123 \div 100 =$

$123 \div 1,000 =$

What do you notice?





4 Complete the calculations.

a) $16 \div 10 = 1.6$

d) $332 \div 1,000 = 0.332$

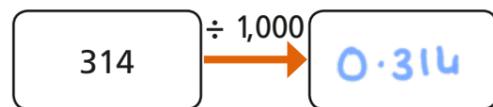
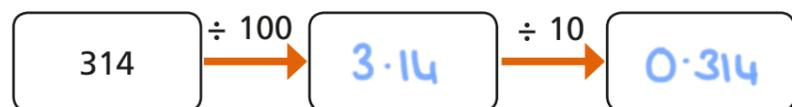
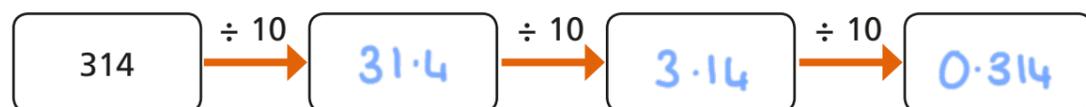
b) $43.4 \div 100 = 0.434$

e) $2.4 \div 200 = 0.012$

c) $614 \div 1,000 = 0.614$

f) $5.09 = 101.8 \div 20$

5 Complete the diagrams.



What do you notice? Why does this happen?

They all give the same final answer because
 $10 \times 10 \times 10 = 100 \times 10 = 1,000$

6 Write $>$, $<$ or $=$ to compare the number sentences.

$5,400 \div 10 \div 10 \div 10 = 5,400 \div 1,000$

$60 \div 100 \div 10 < 600 \div 100$

$5.7 \div 10 = 57 \div 100$

$5,601 \div 1,000 > 5.601 \div 10$

7 Dexter is solving the calculation $5,400 \div 100$



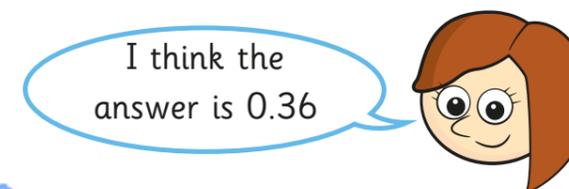
I think the answer is 54.00

Is Dexter correct? yes

Explain your reasoning.

54.00 is the same as 54

8 Rosie is solving the calculation $3,600 \div 200$



I think the answer is 0.36

Is Rosie correct? NO

Explain your reasoning.

She has divide by 100 twice (10,000) she should have divided by 100 then 2 to give an answer of 18

