

Dividing decimals by 10, 100 and 1,000

1 Complete the divisions.

a)

H	T	O	Tths	Hths
		5		

$$5 \div 10 = 0.5$$

b)

H	T	O	Tths	Hths
	1	5		

$$15 \div 10 = 1.5$$

c)

H	T	O	Tths	Hths
		3	8	

$$3.8 \div 10 = 0.38$$

d)

H	T	O	Tths	Hths
	1	3	8	

$$13.8 \div 10 = 1.38$$

What do you notice when you divide a number by 10?

2 Complete the calculations.

a) $7 \div 10 = 0.7$

d) $16 \div 10 = 1.6$

b) $7.8 \div 10 = 0.78$

e) $16.4 \div 10 = 1.64$

c) $7.86 \div 10 = 0.786$

f) $16.48 \div 10 = 1.648$

3 Complete the divisions.

a)

H	T	O	Tths	Hths	Thths
	1	7			

$$17 \div 100 = 0.17$$

b)

H	T	O	Tths	Hths	Thths
		9	4		

$$9.4 \div 100 = 0.094$$

c)

H	T	O	Tths	Hths	Thths
2	7	6			

$$276 \div 100 = 2.76$$

d)

H	T	O	Tths	Hths	Thths
	3	2	5		

$$32.5 \div 100 = 0.325$$

What do you notice when you divide a number by 100?

4 Complete the divisions.

a) $7 \div 100 = 0.07$

b) $109 \div 100 = 1.09$

$7.2 \div 100 = 0.072$

$10.9 \div 100 = 0.109$

$7.25 \div 100 = 0.0725$

$10.95 \div 100 = 0.1095$

- 5 Use a place value chart to work out $136 \div 1,000$

H	T	O	Tths	Hths	Thths
1	3	6			

Complete the calculation.

$$136 \div 1,000 = 0.136$$

Talk to a partner about your method.

- 6 Use your knowledge of measure to work out the answers.

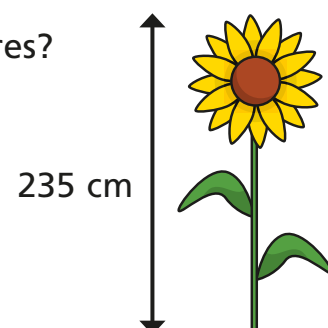
- a) What is the mass of the box in kilograms?

$$2,340 \div 1,000 = 2.34$$



- b) What is the height of the sunflower in metres?

$$235 \div 100 = 2.35$$



- c) What is the amount of juice in litres?

$$380 \div 1,000 = 0.38$$



- 7 Complete the calculations.

a) $147 \div 10 = 14.7$

$$147 \div 100 = 1.47$$

$$147 \div 1,000 = 0.147$$

c) $3,200 \div 10 = 320$

$$3,200 \div 100 = 32$$

$$3,200 \div 1,000 = 3.2$$

b) $21 \div 10 = 2.1$

$$21 \div 100 = 0.21$$

$$21 \div 1,000 = 0.021$$

d) $5,006 \div 10 = 500.6$

$$5,006 \div 100 = 50.06$$

$$5,006 \div 1,000 = 5.006$$

- 8 Complete the divisions.

a) $83 \div 100 = 0.83$

b) $9.5 \div 10 = 0.95$

c) $39 \div 10 = 3.9$

d) $68 \div 1,000 = 0.068$

e) $1,799 \div 100 = 17.99$

f) $1,180 \div 100 = 11.8$

g) $178 \div 10 = 17.8$

h) $3.18 \div 10 = 0.318$