1 Look at the ten frames.

a)

| 1 | 1 | 1 | 1 | 1 |
| 1 | 1 | 1 | 1 | 1 |

What number is represented?

Complete the division. ☐ ÷ 10 = ☐

b)

| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
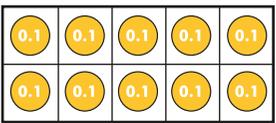
What number is represented?

Complete the division. ☐ ÷ 10 = ☐

c) What is the same? What is different?

2 a) What calculation is represented by the counters?

0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1
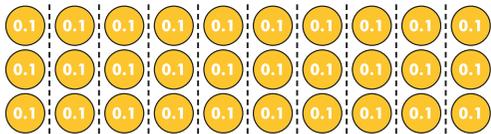
b) Complete the number sentence.

☐ ones divided by ten = ☐ tenths.

3

Ones	Tenths
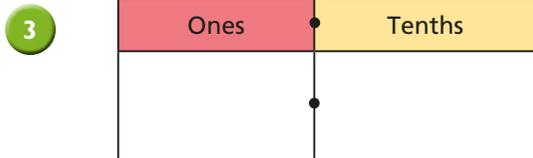
a) Draw counters on the place value chart to show 7

b) Complete the division.   7 ÷ 10 = ☐

c) Draw counters on the place value chart to show your answer.

d) What do you notice?

e) Complete the sentence.

☐ ones divided by ten = ☐ tenths.

4 a) Use a place value chart to represent 9

b) Move the counters to the right to represent 0.9

c) Complete the division.   9 ÷ 10 = ☐

d) What do you notice?

e) Complete the sentence.

☐ ones divided by ten equals ☐ tenths.

5
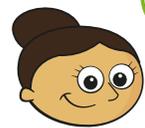
To divide by 10, you split the counters into 10 equal parts.

Dora

To divide by 10, you put the counters on a place value chart and move them one column to the right.
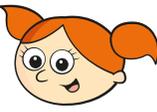
Alex

Who is correct?

Dora   Alex   neither   both

Compare answers with a partner.

d) What do you notice?

e) Complete the sentence.

$\boxed{}$ ones divided by ten = $\boxed{}$ tenths.

4 **a)** Use a place value chart to represent 9

b) Move the counters to the right to represent 0.9

c) Complete the division. $\qquad$ $9 \div 10 = \boxed{}$

d) What do you notice?

e) Complete the sentence.

$\boxed{}$ ones divided by ten equals $\boxed{}$ tenths.

5
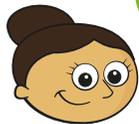
> To divide by 10, you split the counters into 10 equal parts.

Dora

> To divide by 10, you put the counters on a place value chart and move them one column to the right.
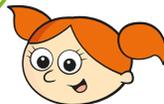
Alex

Who is correct?

Dora $\qquad$ **Alex** $\qquad$ **neither** $\qquad$ **both**

Compare answers with a partner.

6 Here is a one-digit number on a place value chart.

Ones	Tenths
6	

a) Complete the division. $\qquad$ $6 \div 10 = \boxed{}$

b) Write your answer on a place value chart.

c) In your own words, describe what happens to the digits in a number when you divide by 10

d) Use this method to work out the divisions.

$7 \div 10 = \boxed{}$ $\qquad$ $\boxed{} \div 10 = 0.8$

7 Complete the divisions.

a) $4 \div 10 = \boxed{}$ $\qquad$ **d)** $9 \div 10 = \boxed{}$

b) $2 \div 10 = \boxed{}$ $\qquad$ **e)** $\boxed{} \div 10 = 0.3$

c) $\boxed{} = 5 \div 10$ $\qquad$ **f)** $\boxed{} \div 10 = 0.1$

8 Complete the number sentences.

a) $6 \div \boxed{} \div 10 = 3 \div 10$

b) $24 \div 6 \div 10 = \boxed{} \div 10$

c) $42 \div \boxed{} \div 10 = 21 \div 7 \div 10$

d) Write a problem like this for a partner to solve.