Maths

Fractions

Pixie Measuring

Aim

- I can divide a one- or two-digit number by 10 and 100.

Success Criteria

- I can divide a number by 10.
- I can divide a number by 100.
- I can identify digits as ones, tenths and hundredths.

Dividing by 10

× 10

Hundreds	Tens	Ones	tenths	hundredths
		7 •		

÷ 10

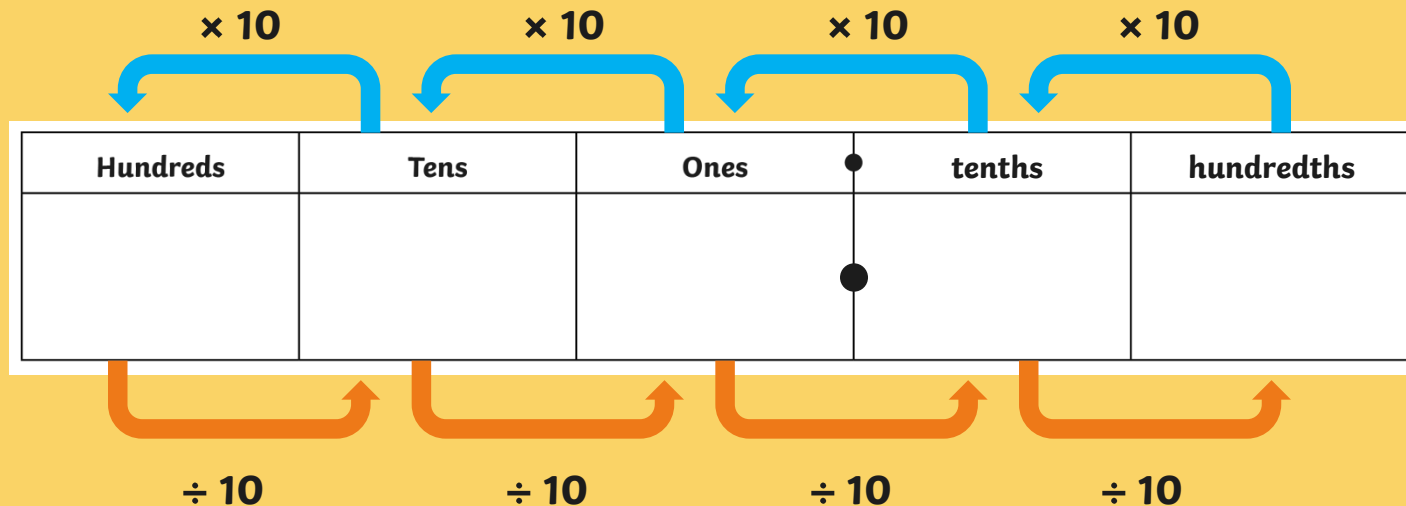What happens to the value of the 7 as it moves left across the place value grid?

What happens to the value of the 7 as it moves right across the place value grid

Dividing by 10

When a digit is moved one place to the left, its value is multiplied by 10.

When a digit is moved one place to the right, its value is divided by 10.

× 10　　　**× 10**　　　**× 10**　　　**× 10**

Hundreds	Tens	Ones	tenths	hundredths

÷ 10　　　**÷ 10**　　　**÷ 10**　　　**÷ 10**

Complete these calculations. How much is each digit in your answer worth?

2 ÷ 10 =　　　　17 ÷ 10 =　　　　60 ÷ 10 =

43 ÷ 10 =　　　85 ÷ 10 =

Dividing by 100

When a digit is moved one place to the right, its value is divided by 10.

Hundreds	Tens	Ones	•	tenths	hundredths
		0	**•**	**0**	**2**

÷ 100   ÷ 100   ÷ 100

How can we use place value to divide by 100?

When a digit is moved **two** places to the right, its value is divided by 100.

Complete these calculations. How much is each digit in your answer worth?

5 ÷ 100 =   14 ÷ 100 =   199 ÷ 100 =
28 ÷ 100 =   70 ÷ 100 =
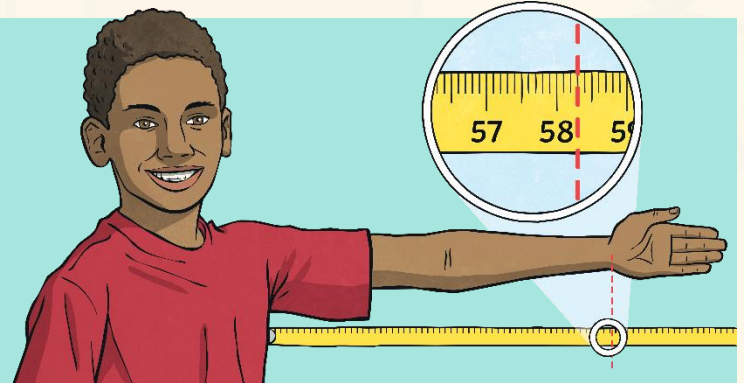
Pixie Magic

Alex's friend cast a spell on him that turned him into a pixie! When he tried to turn him back, he shrunk him even further!

Before the spell, how long was Alex's arm to the nearest centimetre?

Before the spell, Alex's arm was 58cm to the nearest centimetre.

After the first spell, Alex was 10 times smaller.

What size was Alex's arm?

58 ÷ 10 = **5.8cm**

After the second spell, Alex was 100 times smaller.

What size was Alex's arm?

58 ÷ 100 = **0.58cm**

Pixie Magic

Before the spell, how long was Alex's finger to the nearest centimetre?

4cm

After the first spell, Alex was 10 times smaller.

What size was Alex's finger?

0.4cm

After the second spell, Alex was 100 times smaller.

What size was Alex's finger?

0.04cm

Match It

2 ÷ 10 =

2 ÷ 100 =

20 ÷ 10 =

20 ÷ 100 =

22 ÷ 10 =

22 ÷ 100 =

0.22

0.2

2.2

2

0.02

Match It

2 ÷ 10 =

2 ÷ 100 =

20 ÷ 10 =

20 ÷ 100 =

22 ÷ 10 =

22 ÷ 100 =

0.22

0.2

2.2

2

0.02

Match It

9 ÷ 10 =

9 ÷ 100 =

90 ÷ 10 =

90 ÷ 100 =

99 ÷ 10 =

99 ÷ 100 =

9

9.9

0.09

0.9

0.99

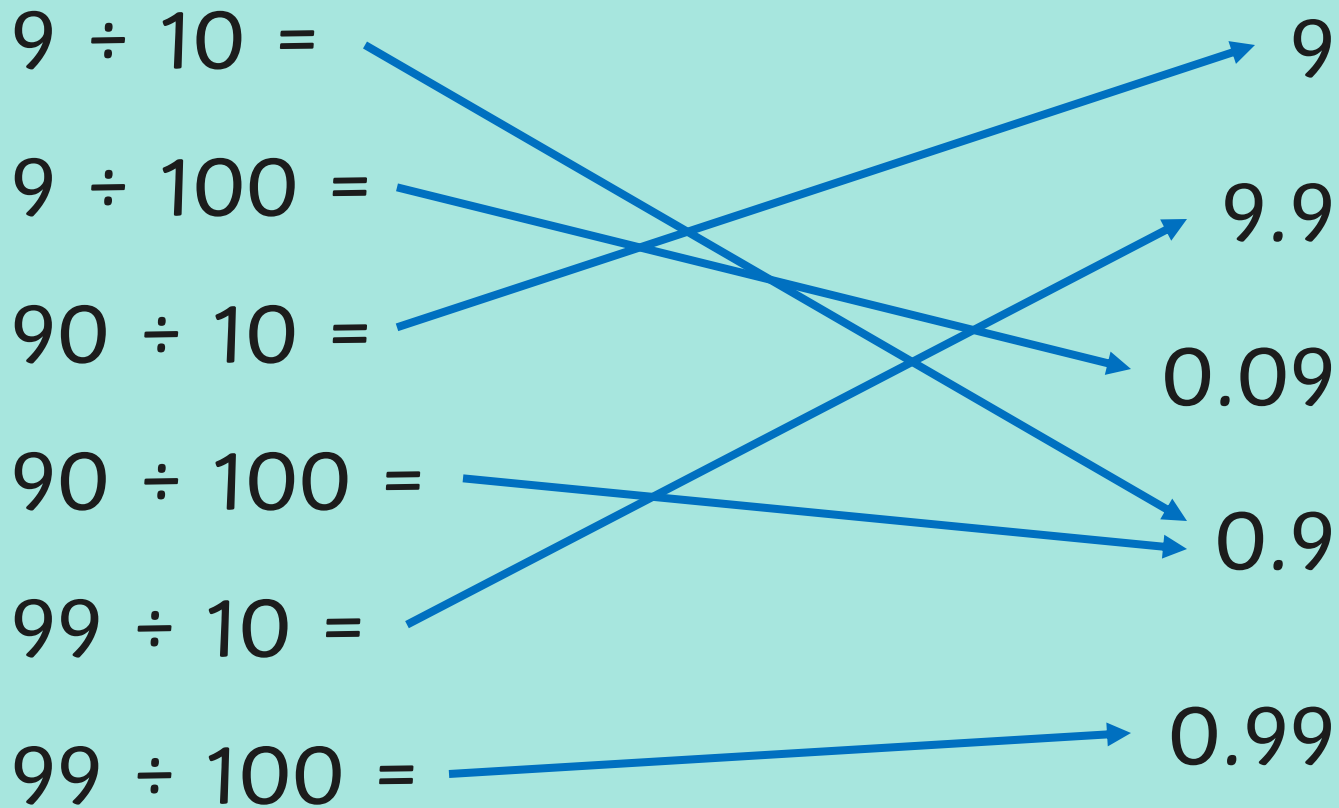# Match It

$9 \div 10 =$ 9

$9 \div 100 =$ 9.9

$90 \div 10 =$ 0.09

$90 \div 100 =$ 0.9

$99 \div 10 =$

$99 \div 100 =$ 0.99

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