



7.2.21

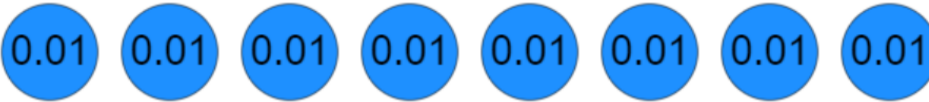
Can you divide a decimal using known facts?

Work through today's slides. Then complete the tasks below.

1) Complete the divisions

a) 
 $0.6 \div 3 =$

b) 
 $1.2 \div 6 =$

c) 
----- $\div 4 =$

2a) Complete these division calculations.

$36 \div 4 =$	$48 \div 4 =$	$16 \div 4 =$	$28 \div 4 =$
$3.6 \div 4 =$	$4.8 \div 4 =$	$1.6 \div 4 =$	$2.8 \div 4 =$
$0.36 \div 4 =$	$0.48 \div 4 =$	$0.16 \div 4 =$	$0.28 \div 4 =$

b) Complete these division calculations

$3.6 \div 6 =$

$4.8 \div 6 =$

$0.72 \div 6 =$

$0.18 \div 6 =$

Extension

1) Complete these calculations

$0.2 \div 4 =$

$0.4 \div 8 =$

$0.3 \div 6 =$

$0.5 \div 10 =$

Explain how the calculations are related to each other.

2) Complete the related calculations.

$7 \times 8 = 56$

$5.6 \div 7 =$

$0.7 \times 8 =$

$5.6 \div 8 =$

3) A box of pens costs £7.20. There are 12 packs in a box and each pack has 3 pens. How much does 1 pen cost?

Challenge

1) Amelia, Bella and Lee are growing sunflowers.

Bella's sunflower is three times as tall as Amelia's.

Lee's sunflower is 0.5m taller than Bella's.

The sunflowers are 5.4m tall in total.

How tall is each sunflower?

2) Write a word problem for the division $3.2 \div 8 =$

8.2.22

Can you use short division to divide?

Follow the link below and watch the video titled divide decimals by integers.

<https://whiterosemaths.com/homelearning?year=year-6>

Work through today's slides and complete the task before completing the work below.

- 1) Predict if the answer to each of these divisions will have no decimal places, one decimal place or two decimal places. Write the letters in the table

$$A = 25 \div 4$$

$$B = 2.6 \div 2$$

$$C = 100.5 \div 5 \quad 10$$

$$D = 8.72 \div 4$$

$$E = 1,080 \div 4$$

$$F = 1.38 \div 3$$

No decimal places	One decimal place	Two decimal places

Now complete each division using short division to check your predictions.

- 2) Reena is trying to solve $7.33 \div 10$ using short division.

Find and explain her mistake

$$\begin{array}{r} 0.703 \\ 10 \overline{) 7.330} \end{array}$$

Choose an efficient method to solve the division correctly.

Challenge

Mrs Forbes has saved £4,960
She shares the money between her 15 grandchildren.
How much do they each receive?

Modelling clay is sold in two different shops.

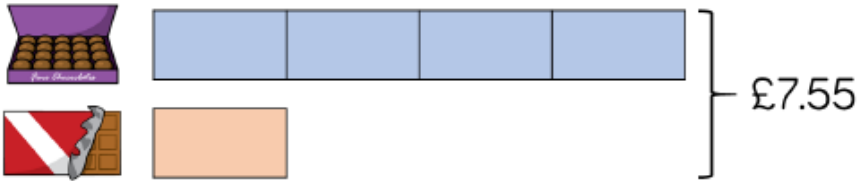
Shop A sells four pots of clay for £7.68

Shop B sells three pots of clay for £5.79

Which shop has the better deal?

Explain your answer.

A box of chocolates costs 4 times as much as a chocolate bar.
Together they cost £7.55



How much does each item cost?

How much more does the box of chocolates cost?

Each division sentence can be completed
using the digits below.



$$\square . 3 \div \square = 0.26$$

$$12 . \square \div \square = 4.2$$

$$4 . \square 8 \div \square = 1.07$$



9.2.22

What is the relationship between fractions and decimals?

Follow the link and watch the video titled decimals as fractions.

<https://whiterosemaths.com/homelearning?year=year-6>

Look at today's slides and complete the task before completing the tasks below.

Decimal	Fraction in tenths or hundredths	Simplified fraction
0.6	$\frac{6}{10}$	$\frac{3}{5}$
		
	$\frac{25}{100}$	
		
0.95		

Match each decimal to the equivalent fraction

0.3	$\frac{33}{100}$
0.03	$\frac{303}{1000}$

0.33	$\frac{33}{1000}$
0.303	$\frac{303}{1000}$
3.3	$\frac{33}{1000}$
0.003	$\frac{3}{1000}$

Extension

a) Which of these fractions is equivalent to 1.823


$\frac{823}{1000}$	$\frac{823}{100}$	$\frac{8}{23}$	$\frac{1000}{823}$
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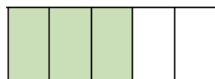
b) Which of these fractions is equivalent to 0.85?

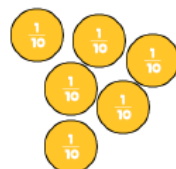
$\frac{85}{100}$	$\frac{17}{10}$	$\frac{8}{5}$	$\frac{17}{20}$
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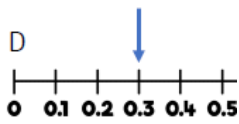
Challenge

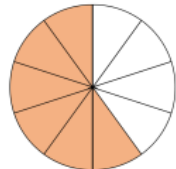
Odd one out.

A 

B 

C 

D 

E 

F 0.2×3

Which is the odd one out and why?

Alex says,

0.84 is equivalent to $\frac{84}{10}$



Do you agree?
Explain why.

10.2.22

How do you calculate the equivalent decimal?

Follow the link and watch the video titled fractions as decimals (1)

<https://whiterosemaths.com/homelearning?year=year-6>

Look at today's slides and complete the task before completing the task below.

Which decimal is equivalent to $\frac{77}{10}$.

10

0.77	77.10	7.7	77.7
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Which decimal is equivalent to $\frac{370}{100}$

100

0.37	0.037	0.307	3.7
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True or False?

0.3 is bigger than $\frac{1}{4}$

Explain your reasoning.

Challenge

Use these digit cards to make fractions, where one card is the denominator and one card is the numerator. Convert each fraction to a decimal and write it in the correct column of the table.

2	4	5	25	50	200	250	500
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Between 0 and 1	Between 1 and 10	Greater than 10

11.2.22

How can you calculate the equivalent decimal?

Follow the link and watch the video titled fractions to decimals (2)

<https://whiterosemaths.com/homelearning?year=year-6>

Look at today's slides and complete the task before completing the task below.


Extension

' Mo says that $\frac{63}{100}$ is less than 0.65

Do you agree with Mo?
Explain your answer.


Amir says,

The decimal 0.42 can be read as 'four tenths and two hundredths'.



Teddy says,

The decimal 0.42 can be read as 'forty-two hundredths'.



Who do you agree with?
Explain your answer.

Challenge

Use short division to find the decimal equivalents of these fractions.

$$\frac{1}{9} = 1 \div 9$$

$$\frac{2}{9} = 2 \div 9$$

Without working them out, predict the missing decimal equivalent to three decimal places.

$$\frac{5}{9} =$$

$$\frac{6}{9} =$$

$$\frac{7}{9} =$$

$$\frac{8}{9} =$$

$$\frac{9}{9} =$$

$$\frac{10}{9} =$$

$$\frac{11}{9} =$$

$$\frac{12}{9} =$$