

Tuesday 16th June 2020

XVI VI MMXX

Hello my amazing mathematicians!

We are going to begin with the challenge mat. Remember that it is optional.

You may wish to try 2 or 3 questions before going on to the main task or you might want to move straight on to the main task. The choice is yours.

Challenge mat 1

Procedural Maths

Section 1

$426 + 114 = \boxed{}$

$244 - 43 = \boxed{}$

Section 3

Write $\frac{1}{2}$ as a decimal.

Write 0.5 as a fraction.

Section 4

$132 \div 6 = \boxed{}$

Write a number sentence to check that your answer is right.

$\boxed{} \times \boxed{} = \boxed{}$

Section 2

Train timetable:-

Neath	07.35	07.50	08.35	09.02
Port Talbot	07.40	07.55	08.40	09.07
Bridgend	08.15	08.25	09.10	09.37
Cardiff	08.31	08.41	09.26	09.53
Bristol	09.10	09.21	09.56	10.23

The 07:40 train from Port Talbot gets to Cardiff at

:

Bethan catches the 07:50 train from Neath to Bridgend. How many minutes does the journey take?

minutes

Section 5

find $\frac{2}{5}$ of 40



For the main task we are going to continue to work from the White Rose site. We are going to convert between percentages, fractions and decimals.

Please let the video guide you when tackling the activity.

1. Copy or click on the link (press Ctrl then click) <https://whiterosemaths.com/homelearning/>

Then click Year 5

Summer Term Plans
White Rose Maths in partnership with the BBC Bitesize Daily team has developed a 12-week learning programme for the summer term. This scheme is designed to help children be ready for their next year of school.
[Click here for more details](#)

Hello there, Parents and Carers!
As schools worldwide close for now in response to COVID-19, you might be wondering how best to help your child or children with their studies at home.
Always happy to help, the White Rose Maths Team has prepared a series of five maths lessons for each year group from Year 1-5. We will be adding five more each week for the next few weeks. Every lesson comes with a short video showing you clearly and simply how to help your child to complete the activity successfully.

Home Learning
Summer Term
Enter Fun
Home Learning - Early Years
Home Learning - Year 1
Home Learning - Year 2
Home Learning - Year 3
Home Learning - Year 4
Home Learning - Year 5
Home Learning - Year 6
Home Learning - Year 7
Home Learning - Year 8
Home Learning - Year 9
Home Learning - Year 10

Early Years
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year 9
Year 10
By Topic

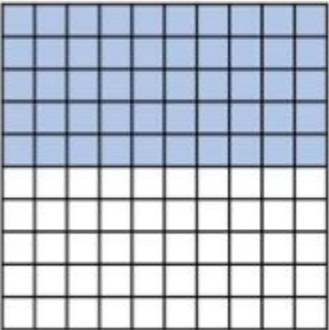
← click

[Click](#)

First, watch the video to support your learning and use it to work on the activity sheets below.

Lesson 2 - Percentages as fractions and decimals

Percentages as fractions and decimals



05:48 $\frac{5}{100} = \frac{5}{10}$ or 0.5 as a decimal.

The video player shows a 10x10 grid with the top 5 rows shaded blue. Below the grid, the text reads: $\frac{5}{100} = \frac{5}{10}$ or 0.5 as a decimal. The video player interface includes a play button, a progress bar at 05:48, and settings icons.

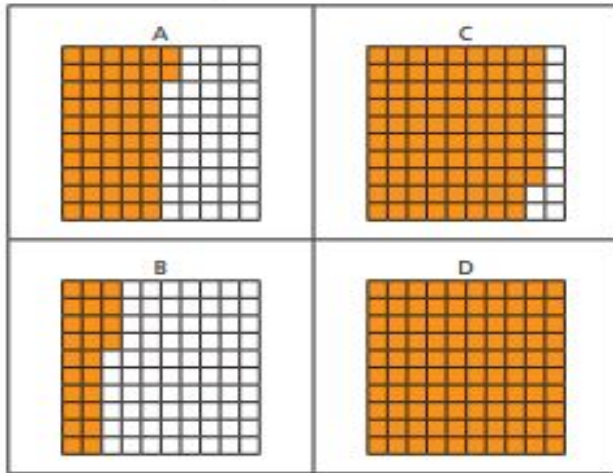
Looking for the worksheets check if they have a subscription. Alternatively, [read more here](#) from BBC Bitesize.

 **Already covered**

[Click here to find an alternative](#)

Percentages as fractions and decimals

1 Here are four hundred squares.

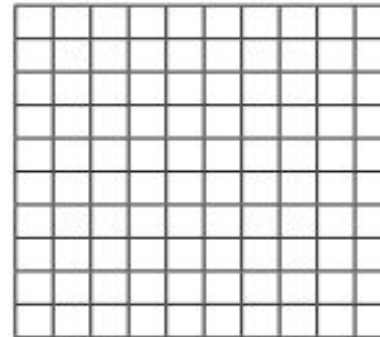


Complete the table.

Hundred square	Percentage	Fraction	Decimal
A		$\frac{52}{100}$	
B			
C			
D			

2 Prove that 0.2 is equal to 20%.

You may use the hundred square to help you.



Why do you think some people think that 0.2 is equal to 2%?

3 Complete the fraction, decimal and percentage equivalents.

a) $32\% = \frac{\square}{100} = \square$

$35\% = \frac{\square}{100} = \square$

$48\% = \frac{\square}{100} = \square$

c) $0.29 = \square\% = \frac{\square}{100}$

$0.71 = \square\% = \frac{\square}{100}$

$0.03 = \square\% = \frac{\square}{100}$

b) $\frac{17}{100} = \square\% = \square$

$\frac{9}{100} = \square\% = \square$

$\frac{90}{100} = \square\% = \square$

4 Write $<$, $>$ or $=$ to complete the statements.

a) 50% $\frac{5}{100}$

d) $\frac{40}{100}$ 40%

b) 25% $\frac{50}{100}$

e) $\frac{70}{100}$ 7%

c) 14% $\frac{41}{100}$

f) 82% $\frac{82}{100}$

5 Write the values in order from smallest to greatest.

a) 33% $\frac{30}{100}$ 3% $\frac{13}{100}$

b) 299% $\frac{91}{100}$ 9% $\frac{9}{10}$

c) 2.5 $\frac{25}{100}$ 250 25% of 100 $\frac{25}{1000}$

6 Convert the fractions to hundredths.

Complete the decimal and percentage equivalents.

a) $\frac{150}{300} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$

b) $\frac{25}{500} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$

c) $\frac{48}{300} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$

d) $\frac{18}{50} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$

e) $\frac{13}{25} = \frac{\text{ }}{100} = \text{ } = \text{ } \%$

7 Circle all the fractions that are greater than or equal to 50% .

$\frac{10}{50}$

$\frac{4}{5}$

$\frac{50}{100}$

$\frac{30}{80}$

$\frac{1}{50}$

$\frac{70}{140}$

8 Jack and Dora go shopping with the same amount of money.

Jack spends $\frac{1}{3}$ of his money.

Dora spends 30% of her money.

a) Who spends more money? _____

Use fraction and percentage equivalence to explain your answer.

b) Jack and Dora each started with £300

How much money do they each have left?

Jack

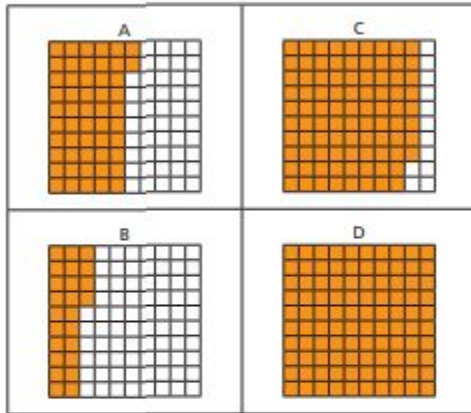
Dora

Answers

Percentages as fractions and decimals

Maths

1 Here are four hundred squares.

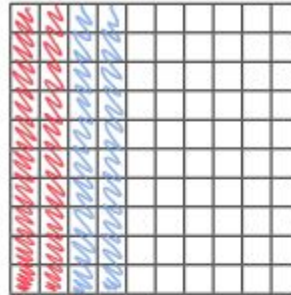


Complete the table.

Hundred square	Percentage	Fraction	Decimal
A	52%	$\frac{52}{100}$	0.52
B	24%	$\frac{24}{100}$	0.24
C	88%	$\frac{88}{100}$	0.88
D	100%	$\frac{100}{100}$	1

2 Prove that 0.2 is equal to 20%.

You may use the hundred square to help you.



$$0.2 = 2 \text{ tenths} = \frac{2}{10} = \frac{20}{100}$$

$$20\% = \frac{20}{100}$$

Why do you think some people think that 0.2 is equal to 2%?

3 Complete the fraction, decimal and percentage equivalents.

a) $32\% = \frac{32}{100} = 0.32$

$35\% = \frac{35}{100} = 0.35$

$48\% = \frac{48}{100} = 0.48$

c) $0.29 = \frac{29}{100} = 29\%$

$0.71 = \frac{71}{100} = 71\%$

$0.03 = \frac{3}{100} = 3\%$

b) $\frac{17}{100} = 17\% = 0.17$

$\frac{9}{100} = 9\% = 0.09$

$\frac{90}{100} = 90\% = 0.9$

4 Write $<$, $>$ or $=$ to complete the statements.

a) 50% $>$ $\frac{5}{100}$

d) $\frac{40}{100}$ $=$ 40%

b) 25% $<$ $\frac{50}{100}$

e) $\frac{70}{100}$ $>$ 7%

c) 14% $<$ $\frac{41}{100}$

f) 82% $=$ $\frac{82}{100}$

5 Write the values in order from smallest to greatest.

a) 33% $\frac{30}{100}$ 3% $\frac{13}{100}$

3% $\frac{13}{100}$ $\frac{30}{100}$ 33%

b) 299% $\frac{91}{100}$ 9% $\frac{9}{10}$

9% $\frac{9}{10}$ $\frac{91}{100}$ 299%

c) 2.5 $\frac{25}{100}$ 250 25% of 100 $\frac{25}{1000}$

$\frac{25}{1000}$ $\frac{25}{100}$ 2.5 25% of 100 250

6 Convert the fractions to hundredths.

Complete the decimal and percentage equivalents.

a) $\frac{150}{300} = \frac{50}{100} = 0.5 = 50\%$

b) $\frac{25}{500} = \frac{5}{100} = 0.05 = 5\%$

c) $\frac{48}{300} = \frac{16}{100} = 0.16 = 16\%$

d) $\frac{18}{50} = \frac{36}{100} = 0.36 = 36\%$

e) $\frac{13}{25} = \frac{52}{100} = 0.52 = 52\%$

7 Circle all the fractions that are greater than or equal to 50%.

$\frac{10}{50}$

$\frac{4}{5}$

$\frac{50}{100}$

$\frac{30}{80}$

$\frac{1}{50}$

$\frac{70}{140}$

8 Jack and Dora go shopping with the same amount of money.

Jack spends $\frac{1}{3}$ of his money.

Dora spends 30% of her money.

a) Who spends more money? Jack

Use fraction and percentage equivalence to explain your answer.

$$\frac{1}{3} = \frac{10}{30}$$

$$30\% = \frac{3}{10} = \frac{9}{30}$$

b) Jack and Dora each started with £300

How much money do they each have left?

Jack $\pounds 200$

Dora $\pounds 210$

Procedural Maths

1

Section 1

$426 + 114 =$

540

$244 - 43 =$

201

Section 2

Train timetable:-

Neath	07.35	07.50	08.35	09.02
Port Talbot	07.40	07.55	08.40	09.07
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Cardiff	08.31	08.41	09.26	09.53
Bristol	09.10	09.21	09.56	10.23

The 07:40 train from Port Talbot gets to Cardiff at

08:31

Bethan catches the 07:50 train from Neath to Bridgend. How many minutes does the journey take?

35 minutes

Section 5

find $\frac{2}{3}$ of 40

16

Section 3

Write $\frac{1}{2}$ as a decimal.

0.5

Write 0.5 as a fraction.

$\frac{1}{2}$

*Or any equivalent

Section 4

$132 \div 6 =$

22

Write a number sentence to check that your answer is right.

22

×

6

=

132

