

Maths Planning and Ideas



Week Commencing: 27.4.20

Year Group: Year 5

Times Table Rockstars website - <https://trockstars.com/>

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	LC: Can you investigate percentages?	LC: Can you understand percentages?	LC: Can you understand percentages as fractions and decimals?	LC: Can you understand percentages as fractions and decimals?	LC: Can you convert between fractions, decimals and percentages?
Activity	<p>Starter – Times Table Rockstars activities</p> <p>Main Teaching Go to the White Rose website and watch the video for ‘Lesson 3 Understand Percentages this is included under Week 2. Pause the video at around 2 minutes (where it says have a go at questions 1-3 etc) https://whiterosemaths.com/homelearning/year-5/</p> <p>Activity How many different examples of real life percentages can you find? Write a list of them on a piece of paper. Use the internet or other resources to find as many interesting examples as you can. For example: 17% of the world have blue eyes. <i>You might want to find something that you are interested in eg. football – 8.3% of football matches in the premier league last season ended 0-0.</i></p>	<p>Starter – Times Table Rockstars activities</p> <p>Main Teaching Go to the White Rose website and watch the video for ‘Lesson 3 Understand Percentages this is included under Week 2. Watch the rest of the video (ignore the part where it says, ‘Have a go at...?’). https://whiterosemaths.com/homelearning/year-5/</p> <p>Activity Complete the questions on percentages on the worksheet below. Tell the chn to take care on the last question to explain their answer. Tell them to remember – percent means <u>out of 100</u>.</p>	<p>Starter – Times Table Rockstars activities</p> <p>Main Teaching Go to the White Rose website and watch the video for ‘Lesson 4 Percentages as Fractions and Decimals under Week 2. Have a go at the questions below as you work through the video. I have only included the worksheet up to question 3 – the rest will be tomorrow! https://whiterosemaths.com/homelearning/year-5/</p> <p>Activity Complete the worksheet below as you work through the video.</p>	<p>Starter – Times Table Rockstars activities</p> <p><i>NB. Continuation of the lesson from yesterday.</i></p> <p>Main Teaching If your child was confident with yesterday, they might be able to start the worksheet straight away. If not, re-watch the video from yesterday, concentrating on the second half.</p> <p>Activity Complete the worksheet below. The problem at the end is quite difficult.</p>	<p>Starter – Times Table Rockstars activities</p> <p>Main Teaching Go to the White Rose website and watch the video for ‘Lesson Equivalent FDP this is included under Week 2. Ignore the end part where it says ‘complete questions 4-7’. https://whiterosemaths.com/homelearning/year-5/</p> <p>Activity Complete the worksheet below.</p>

Where can I complete further work?

[Twinkl](#) – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, powerpoints and interactive games to support all areas of learning.

[Classroom Secrets](#) – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

[White Rose Maths](#) – Free Maths home learning resources for all ages. Watch the videos and try the questions.

[Primary Stars](#) – Free Maths home learning packs for Year 1 and 2.

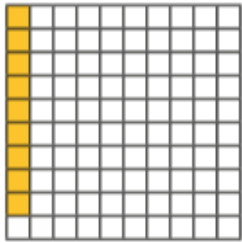
[BBC Bitesize Primary](#) – Free learning resources available for KS1 and KS2 across all subjects.

[I See Maths](#) – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

[Top Marks](#) – Free educational resources and games for English and Maths.

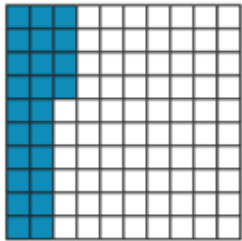
[ICT Games](#) – Free educational resources and games for English and Maths.

Tuesday Activity – Understanding percentages



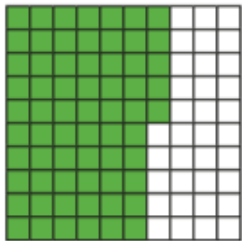
There are parts out of a hundred shaded.

This is %.



There are parts out of a hundred shaded.

This is %.

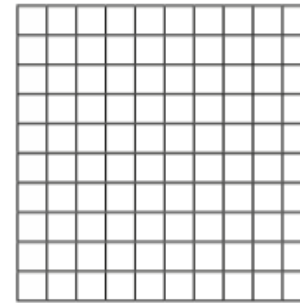


There are parts out of a hundred shaded.

This is %.

Shade 15% of the hundred square red.

Shade 32% of the hundred square blue.



What percentage of the hundred square is not shaded? %

a) Is 1% of this bar model shaded? _____



Explain your reasoning.

b) What percentage of each bar model is shaded?

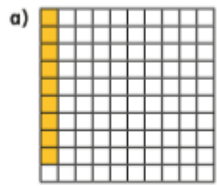


%



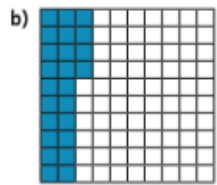
%

Tuesday Answers



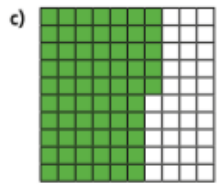
There are parts out of a hundred shaded.

This is %.



There are parts out of a hundred shaded.

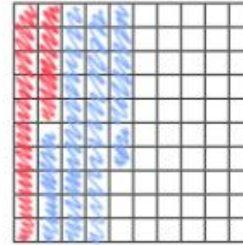
This is %.



There are parts out of a hundred shaded.

This is %.

Shade 15% of the hundred square red.
Shade 32% of the hundred square blue.



What percentage of the hundred square is not shaded? %

a) Is 1% of this bar model shaded? No



Explain your reasoning.

It's split into 10 parts so each part is 10%

b) What percentage of each bar model is shaded?



%

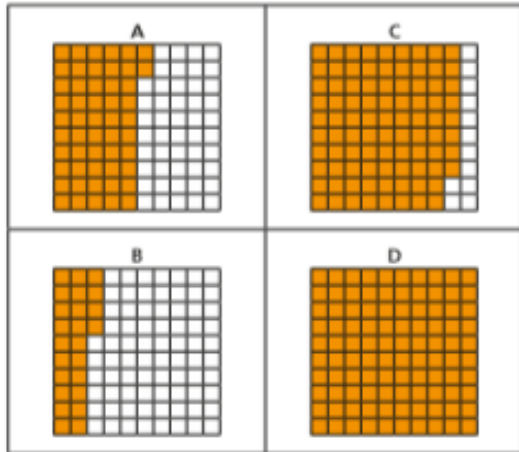


%

Percentages as fractions and decimals



1 Here are four hundred squares.

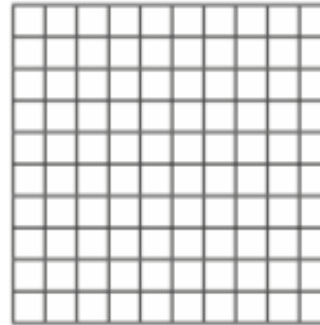


Complete the table.

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

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

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

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

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

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

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

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

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

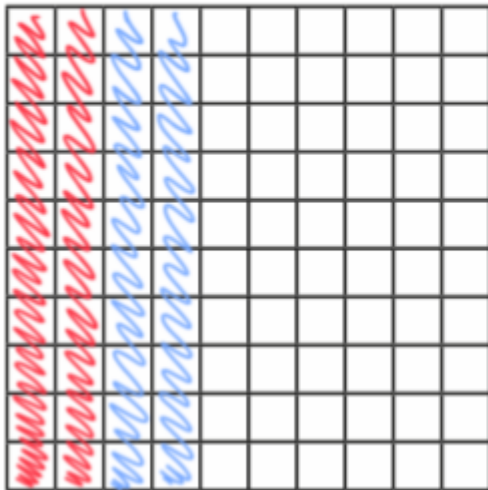
Wednesday answers

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

Prove that 0.2 is equal to 20%.

You may use the hundred square to help you.



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

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

Complete the fraction, decimal and percentage equivalents.

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

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

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

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

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

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

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

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

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

Thursday Activity

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% $\frac{82}{100}$

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 $\frac{25}{1000}$

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

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

$\frac{10}{50}$

$\frac{4}{5}$

$\frac{50}{100}$

$\frac{30}{80}$

$\frac{1}{50}$

$\frac{70}{140}$

Thursday Activity Answers

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

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

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

$\frac{10}{50}$	$\frac{4}{5}$	$\frac{50}{100}$
$\frac{30}{80}$	$\frac{1}{50}$	$\frac{70}{140}$

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

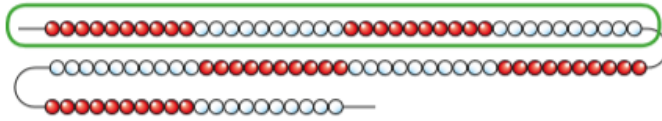
How much money do they each have left?

Jack £200

Dora £210

Friday Activity

1 Rosie makes a number on a 100 bead string.



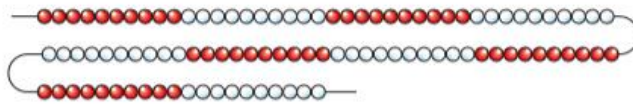
a) What fraction of the bead string is circled?

b) Write the fraction as a decimal.

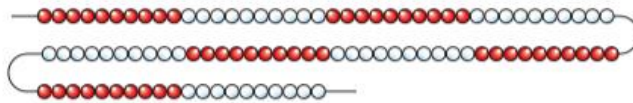
c) Write the decimal as a percentage. %

2 Circle the value on each 100 bead string.

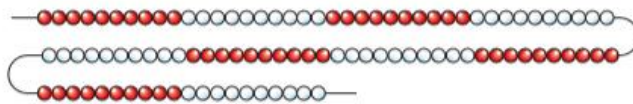
a) 70%



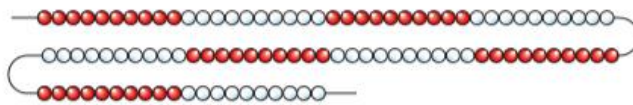
b) 0.08



c) $\frac{45}{100}$



d) 95%



3 a) What fraction, decimal and percentage of the hundred square is shaded?

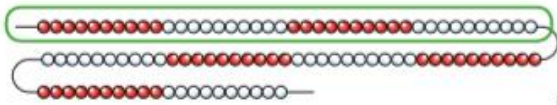
Hundred square	Fraction	Decimal	Percentage

b) Complete the table.

Quarters	Hundredths	Decimal
$\frac{1}{4}$	$\frac{\square}{100}$	
$\frac{\square}{4}$	$\frac{50}{100}$	
		0.75

Friday Activity

Rosie makes a number on a 100 bead string.



a) What fraction of the bead string is circled?

$\frac{40}{100}$

b) Write the fraction as a decimal.

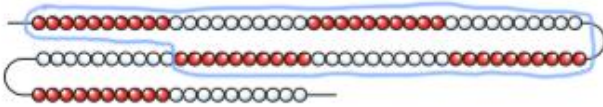
0.4

c) Write the decimal as a percentage.

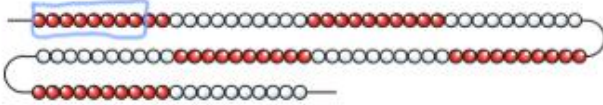
40%

Circle the value on each 100 bead string.

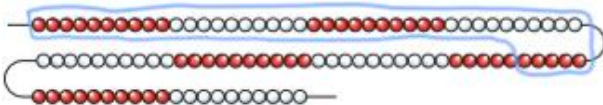
a) 70%



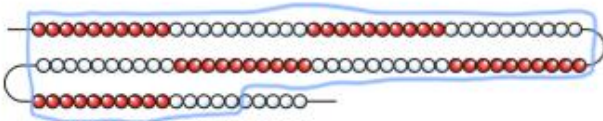
b) 0.08



c) $\frac{45}{100}$



d) 95%



Hundred square	Fraction	Decimal	Percentage
	$\frac{1}{4}$	0.25	25%
	$\frac{1}{2}$	0.5	50%
	$\frac{3}{4}$	0.75	75%

Complete the table.

Quarters	Hundredths	Decimal
$\frac{1}{4}$	$\frac{25}{100}$	0.25
$\frac{2}{4}$	$\frac{50}{100}$	0.5
$\frac{3}{4}$	$\frac{75}{100}$	0.75