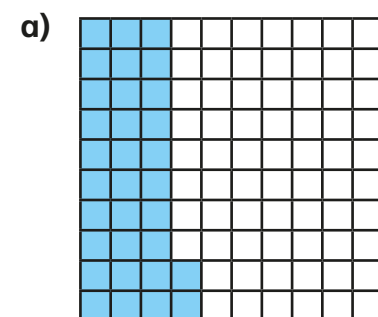


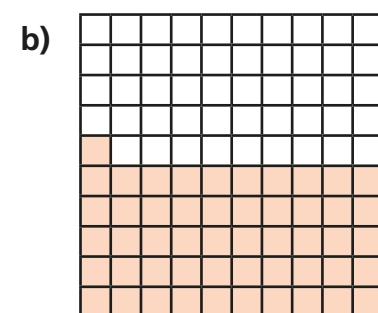
Understand the meaning of percentage using a hundred square

- 1 For each hundred square, write how many squares have been shaded. Then write the percentage of the square that is shaded.



squares shaded: 32

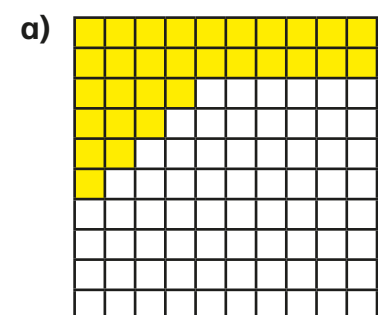
percentage shaded: 32%



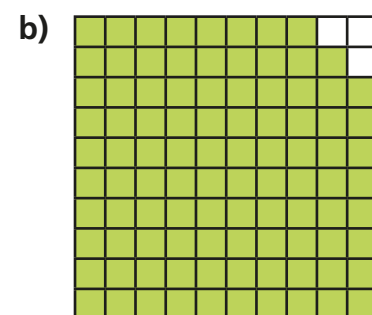
squares shaded: 51

percentage shaded: 51%

- 2 What fraction of each hundred square has been shaded? Also write your answer as a percentage.



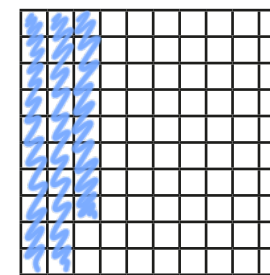
$$\frac{30}{100} = \text{30\%}$$



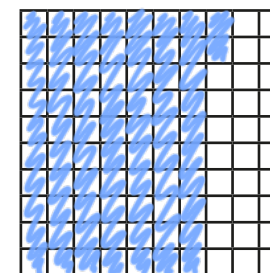
$$\frac{97}{100} = \text{97\%}$$

Discuss how you worked out the percentages.

- 3 a) Shade 28% of the hundred square.



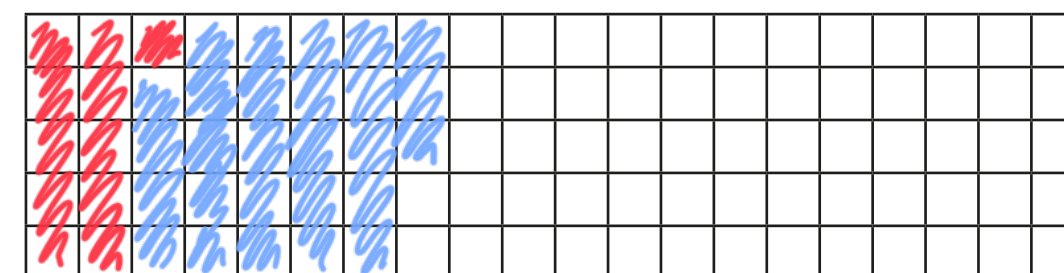
- b) Shade 72% of the hundred square.



- c) Dani shades 100% of the squares on a hundred grid.

How many squares has she shaded? 100

- 4 Shade $\frac{11}{100}$ of the grid red and 27% of the grid blue.



What percentage of the grid is not shaded? 62%

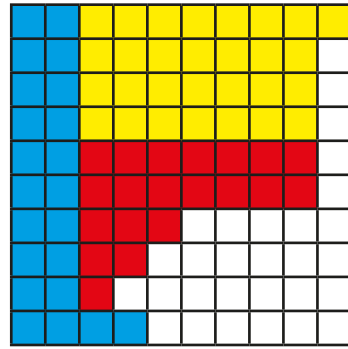
Explain or show your method.

62 squares out of 100 is equal to 62%
or $\frac{11}{100} = 11\%$, $11\% + 27\% = 38\%$ and $100\% - 38\% = 62\%$



5

a) Complete the table for the hundred square.



Colour	% shaded
blue	22%
red	20%
yellow	29%
white	29%

b) What check could you make to help you work out if you are right?

Check they add up to 100%

6

Complete the statements.

$$\text{a) } \frac{1}{5} = \frac{2}{10} = \frac{20}{100} = 20\%$$

$$\text{c) } \frac{3}{4} = \frac{75}{100} = 75\%$$

$$\text{b) } \frac{1}{4} = \frac{25}{100} = 25\%$$

7

a) Complete the table.

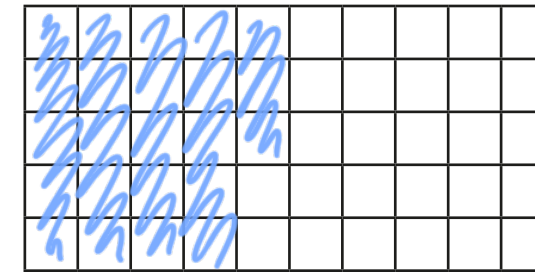
Fraction shaded	$\frac{40}{100}$	$\frac{8}{10}$	$\frac{20}{1000}$
Percentage shaded	40%	80%	2%

b) If you shade 73% of a hundred square, what fraction is unshaded?

$$\frac{27}{100}$$

8

A rectangle is made up of 50 squares.



Shade 46% of this rectangle.

Compare answers with a partner.

Did you get the same answer?

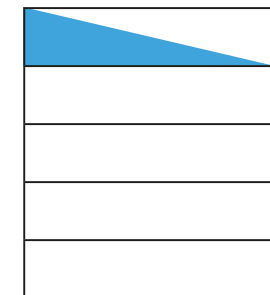
What mistakes do you think some people make?

9

What percentage of each diagram is shaded?



70%



10%