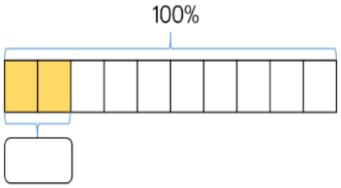
Steps to Success

Lockdown	
Date	12.1.21
Subject/s	**Maths**
Learning Objective	To convert between fractions and percentages

		SA	TA
Success Criteria	I know percentage means out of 100		
	I can use my knowledge of equivalent fractions to change fractions to a denominator of 100		
	I can write statements as fractions percentages		
Support	Independent Adult Support ( ) Group Work		

Pre-task

What percentage and fraction does the bar model show?



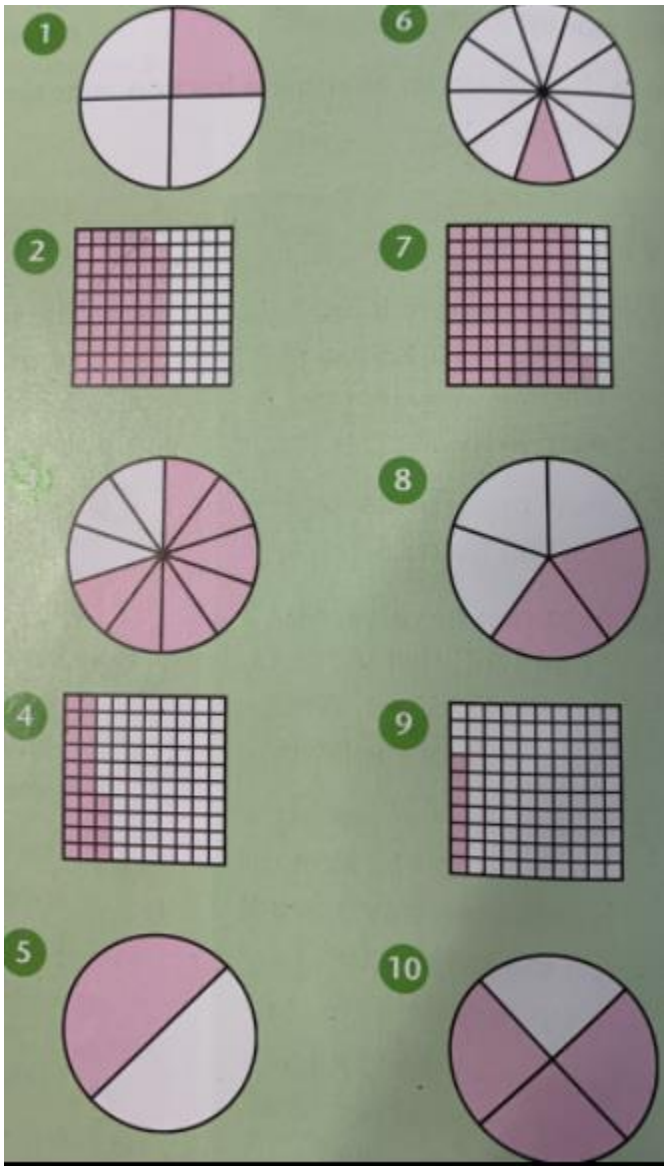
What is 75% as a fraction?

What is 3/10 as a percentage?

Thirteen out of twenty skittles were yellow. What is this as a fraction and percentage?

Teacher Led

Remember to attend Miss Bailey's zoom lesson at 11.30 for help on this! The link can be found on Class Dojo.



Fluency

Convert these fractions to percentages using the denominator method.

1) $\frac{1}{2} = \frac{___}{100} = ____\ \%$

2) $\frac{3}{10} = \frac{___}{100} = ____\ \%$

3) $\frac{7}{10} = \frac{___}{100} = ____\ \%$

4) $\frac{1}{4} = \frac{___}{100} = ____\ \%$

5) $\frac{1}{5} = \frac{___}{100} = ____\ \%$

6) $\frac{3}{4} = \frac{___}{100} = ____\ \%$

7) $\frac{2}{5} = \frac{___}{100} = ____\ \%$

8) $\frac{9}{10} = \frac{___}{100} = ____\ \%$

9) $\frac{1}{20} = \frac{___}{100} = ____\ \%$

10) $\frac{4}{5} = \frac{___}{100} = ____\ \%$

11) $\frac{7}{20} = \frac{___}{100} = ____\ \%$

12) $\frac{7}{50} = \frac{___}{100} = ____\ \%$

13) $\frac{4}{25} = \frac{___}{100} = ____\ \%$

14) $\frac{9}{20} = \frac{___}{100} = ____\ \%$

15) $\frac{11}{50} = \frac{___}{100} = ____\ \%$

16) $\frac{6}{5} = \frac{___}{100} = ____\ \%$

17) $\frac{5}{2} = \frac{___}{100} = ____\ \%$

18) $\frac{7}{4} = \frac{___}{100} = ____\ \%$

Convert the percents into fractions with a denominator of 100

1. 54 % = _____

2. 86 % = _____

3. 41 % = _____

4. 39 % = _____

5. 15 % = _____

6. 57 % = _____

7. 27 % = _____

8. 5 % = _____

9. 29 % = _____

10. 25 % = _____

11. 70 % = _____

12. 6 % = _____

13. 22 % = _____

14. 100 % = _____

Simplify the fractions for 3 dojos!

What percentage could be used in each sentence.

2. Half the tissues in the box had been used.
3. Nineteen of the twenty horses in the race were brown.
4. The basketball team won four in every five matches played.
5. Twenty-nine hundredths of the Earth's surface is water.
6. Ella and Elysia achieved full marks in the Maths Test.
7. Darren has read three quarters of his book.
8. Twenty-seven in every fifty visitors to the Museum stayed for more than two hours.

(From Y6 TYM P63)

Fluency Answers

CONVERT FRACTION TO PERCENT 1 ANSWERS

Convert these fractions to percentages using the denominator method.

1) $\frac{1}{2} = \frac{50}{100}$ = 50 %

2) $\frac{3}{10} = \frac{30}{100}$ = 30 %

3) $\frac{7}{10} = \frac{70}{100}$ = 70 %

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

5) $\frac{1}{5} = \frac{20}{100}$ = 20 %

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

7) $\frac{2}{5} = \frac{40}{100}$ = 40 %

8) $\frac{9}{10} = \frac{90}{100}$ = 90 %

9) $\frac{1}{20} = \frac{5}{100}$ = 5 %

10) $\frac{4}{5} = \frac{80}{100}$ = 80 %

11) $\frac{7}{20} = \frac{35}{100}$ = 35 %

12) $\frac{7}{50} = \frac{14}{100}$ = 14 %

13) $\frac{4}{25} = \frac{16}{100}$ = 16 %

14) $\frac{9}{20} = \frac{45}{100}$ = 45 %

15) $\frac{11}{50} = \frac{22}{100}$ = 22 %

16) $\frac{6}{5} = \frac{120}{100}$ = 120 %

17) $\frac{5}{2} = \frac{250}{100}$ = 250 %

18) $\frac{7}{4} = \frac{175}{100}$ = 175 %

Answers

1) $\frac{54}{100}$

2) $\frac{86}{100}$

3) $\frac{41}{100}$

4) $\frac{39}{100}$

5) $\frac{15}{100}$

6) $\frac{57}{100}$

7) $\frac{27}{100}$

8) $\frac{5}{100}$

9) $\frac{29}{100}$

10) $\frac{25}{100}$

11) $\frac{70}{100}$

12) $\frac{6}{100}$

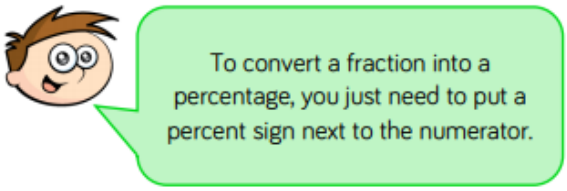
13) $\frac{22}{100}$

14) $\frac{100}{100}$

Problem Solving and Reasoning

Explain it!

Paulo says,



Is Paulo correct? Explain your answer.

Explain it!

In a Maths test, Tom answered 62% of the questions correctly.

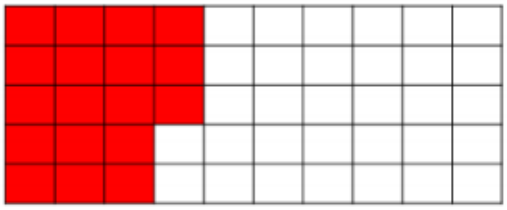
Lily answered $\frac{3}{5}$ of the questions correctly.

Who answered more questions correctly?

Explain your answer.

Use it!

Explain it!



Mark thinks that $\frac{18}{100}$ of this grid has been shaded.
Nisha thinks that 36% of the grid has been shaded.

Who do you agree with?

Explain your reasoning.

Use it!

Complete the table.

Fraction	Fraction in Hundredths	Percentage
$\frac{7}{10}$	$\frac{\quad}{100}$	
$\frac{7}{\quad}$	$\frac{35}{100}$	
$\frac{7}{\quad}$	$\frac{\quad}{100}$	28%

Answers
Paulo is incorrect, this only works when the denominator is 100 because percent means per hundred.
Tom answered more questions correctly because $\frac{3}{5}$ as a percentage is 60% and this is less than 62%
Nisha is correct because the grid is 50 squares not 100 and 18 of them are shaded.
7/10 = 70/100 = 70% 7/20 = 35/100 = 35% 7/25 = 28/100 = 28%

Further Challenge

Pizza

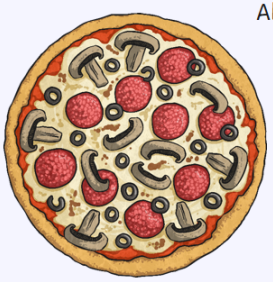
Aleena and Haris each have a pizza.

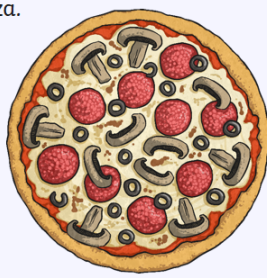
Aleena eats 60% of her pizza.

Haris eats $\frac{3}{4}$ of his pizza.

Who eats more pizza?

How do you know?





Create your own word problem comparing two different amounts using fractions and percentages.