Varied Fluency
Step 1: Fractions to Percentages

National Curriculum Objectives:

Mathematics Year 6: (6F11) Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

Differentiation:

Developing Questions to support converting fractions to percentages, where the denominator is 10 or 100.
Expected Questions to support converting fractions to percentages, where the denominator is a factor of 100.
Greater Depth Questions to support converting fractions to percentages, where the denominator is not always a factor of 100.

More Year 6 Percentages resources.

Did you like this resource? Don't forget to review it on our website.

Fractions to Percentages

1a. Match equivalent fractions to the correct percentages.

$\frac{5}{10}$	$\frac{90}{100}$	50%
$\frac{9}{10}$	$\frac{30}{100}$	20%
$\frac{2}{10}$	$\frac{50}{100}$	30%
$\frac{3}{10}$	$\frac{20}{100}$	90%

D VF

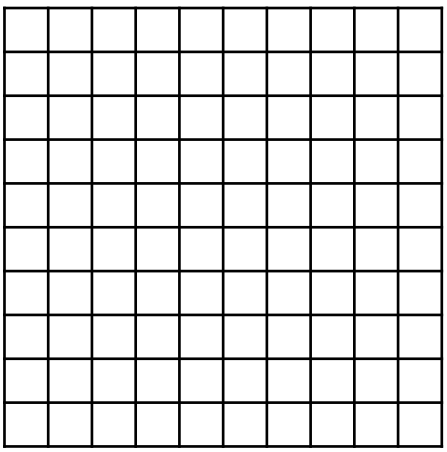
Fractions to Percentages

1b. Match equivalent fractions to the correct percentages.

$\frac{1}{10}$	$\frac{40}{100}$	80%
$\frac{6}{10}$	$\frac{10}{100}$	60%
$\frac{8}{10}$	$\frac{80}{100}$	10%
$\frac{4}{10}$	$\frac{60}{100}$	40%

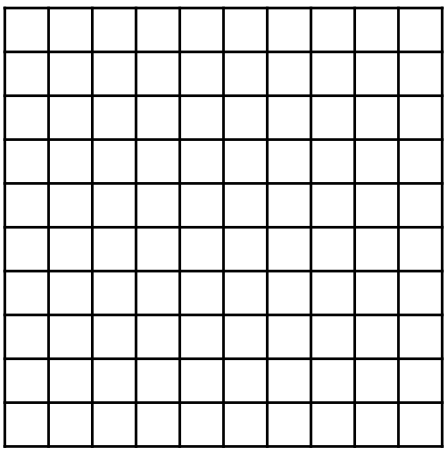
D VF

2a. Shade the squares to show $\frac{4}{10}$ and write as a percentage.



D VF

2b. Shade the squares to show $\frac{2}{10}$ and write as a percentage.



D VF

3a. Competitors in a singing competition need more than 50% to get to the final. What percentage did each child score?

Emily	$\frac{7}{10}$
Charlie	$\frac{10}{100}$
Zara	$\frac{40}{100}$

D Who gets to the final? VF

3b. Competitors in a music competition need more than 80% to get to the final. What percentage did each child score?

Tyler	$\frac{3}{10}$
Nathan	$\frac{9}{10}$
Willow	$\frac{77}{100}$

D Who gets to the final? VF

4a. True or false?

$\frac{6}{10}$ is equivalent to 50%.

D VF

4b. True or false?

$\frac{7}{10}$ is equivalent to 70%.

D VF

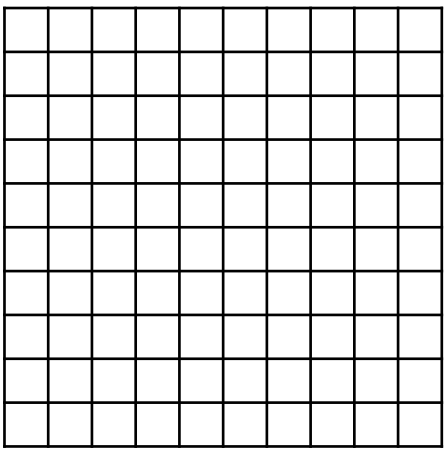
Fractions to Percentages

5a. Match equivalent fractions to the correct percentages.

$\frac{3}{5}$	$\frac{5}{100}$	20%
$\frac{26}{50}$	$\frac{60}{100}$	52%
$\frac{1}{20}$	$\frac{20}{100}$	5%
$\frac{5}{25}$	$\frac{52}{100}$	60%

E VF

6a. Shade the squares to show $\frac{6}{20}$ and write as a percentage.



E VF

7a. Competitors in a gym competition need more than 75% to get to the final. What percentage did each child score?

Ava-Lily	$\frac{38}{50}$
Tyrese	$\frac{8}{20}$
Rochelle	$\frac{18}{25}$

Who gets to the final?

E VF

8a. True or false?

$\frac{7}{25}$ is equivalent to 28%.

E VF

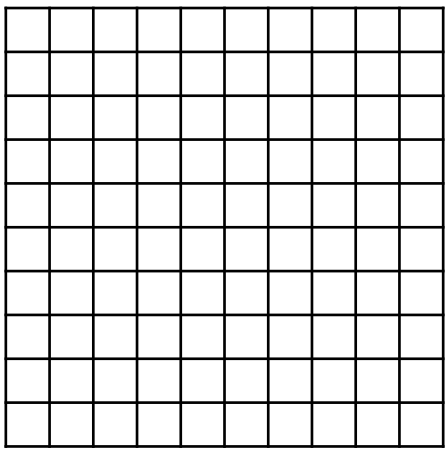
Fractions to Percentages

5b. Match equivalent fractions to the correct percentages.

$\frac{6}{25}$	$\frac{18}{100}$	50%
$\frac{5}{20}$	$\frac{24}{100}$	18%
$\frac{9}{50}$	$\frac{50}{100}$	25%
$\frac{2}{4}$	$\frac{25}{100}$	24%

E VF

6b. Shade the squares to show $\frac{9}{25}$ and write as a percentage.



E VF

7b. Competitors in a dance competition need more than 70% to get to the final. What percentage did each child score?

Skyla	$\frac{29}{50}$
Kira	$\frac{15}{20}$
Dawson	$\frac{7}{25}$

Who gets to the final?

E VF

8b. True or false?

$\frac{14}{20}$ is equivalent to 75%.

E VF

Fractions to Percentages

9a. Match the fractions to the correct percentages.

$\frac{36}{45}$	75%
$\frac{66}{75}$	80%
$\frac{21}{28}$	15%
$\frac{12}{80}$	88%

GD VF

10a. Shane asked 60 children to choose their favourite flavour of ice cream. Here are his results.

Flavour	Number of children
Chocolate	26
Vanilla	15
Strawberry	19
Total	60

What percentage of the children chose vanilla?

GD VF

11a. Competitors in a art competition need more than 60% to get to the final. What percentage did each child score?

Amie	$\frac{19}{76}$
Robert	$\frac{24}{32}$
David	$\frac{28}{70}$

GD **Who gets to the final?** VF

12a. True or false?

$\frac{14}{70}$ **is equivalent to 25%.**

GD VF

Fractions to Percentages

9b. Match the fractions to the correct percentages.

$\frac{48}{75}$	25%
$\frac{15}{60}$	65%
$\frac{26}{65}$	40%
$\frac{39}{60}$	64%

GD VF

10b. Lin asked 80 children to choose their favourite type of biscuit. Here are her results.

Type	Number of children
Bourbon	32
Digestive	27
HobNob	21
Total	80

What percentage of the children chose bourbons?

GD VF

11b. Competitors in a maths competition need more than 80% to get to the final. What percentage did each child score?

Will	$\frac{49}{70}$
Ruby	$\frac{69}{75}$
Betty	$\frac{56}{80}$

GD **Who gets to the final?** VF

12b. True or false?

$\frac{16}{40}$ **is equivalent to 40%.**

GD VF

Varied Fluency
Fractions to Percentages

Developing

1a. $\frac{5}{10} = \frac{50}{100} = 50\%$, $\frac{9}{10} = \frac{90}{100} = 90\%$,

$\frac{2}{10} = \frac{20}{100} = 20\%$, $\frac{3}{10} = \frac{30}{100} = 30\%$

2a. 40 squares shaded = 40%

3a. Emily = 70%; Charlie = 10%; Zara = 40%; Emily reaches the final.

4a. False, $\frac{6}{10}$ is 60%.

Expected

5a. $\frac{3}{5} = \frac{60}{100} = 60\%$, $\frac{26}{50} = \frac{52}{100} = 52\%$,

$\frac{1}{20} = \frac{5}{100} = 5\%$, $\frac{5}{25} = \frac{20}{100} = 20\%$

6a. 30 squares shaded = 30%

7a. Ava-Lily = 76%; Tyrese = 40%; Rochelle = 72%; Ava-Lily reaches the final.

8a. True

Greater Depth

9a. $\frac{36}{45} = 80\%$, $\frac{66}{75} = 88\%$,

$\frac{21}{28} = 75\%$, $\frac{12}{80} = 15\%$

10a. 25% chose vanilla.

11a. Amie = 25%; Robert = 75%; David = 40%; Robert reaches the final.

12a. False, $\frac{14}{70}$ is 20%.

Varied Fluency
Fractions to Percentages

Developing

1b. $\frac{1}{10} = \frac{10}{100} = 10\%$, $\frac{6}{10} = \frac{60}{100} = 60\%$,

$\frac{8}{10} = \frac{80}{100} = 80\%$, $\frac{4}{10} = \frac{40}{100} = 40\%$

2b. 20 squares shaded = 20%

3b. Tyler = 30%; Nathan = 90%; Willow = 77%; Nathan reaches the final.

4b. True

Expected

5b. $\frac{6}{25} = \frac{24}{100} = 24\%$, $\frac{5}{20} = \frac{25}{100} = 25\%$,

$\frac{9}{50} = \frac{18}{100} = 18\%$, $\frac{2}{4} = \frac{50}{100} = 50\%$

6b. 36 squares shaded = 36%

7b. Skyla = 58%; Kira = 75%; Dawson = 28%; Kira reaches the final.

8b. False, $\frac{14}{20}$ is 70%.

Greater Depth

9b. $\frac{48}{75} = 64\%$, $\frac{15}{60} = 25\%$,

$\frac{26}{65} = 40\%$, $\frac{39}{60} = 65\%$

10b. 40% chose bourbons.

11b. Will = 70%; Ruby = 92%; Betty = 70%; Ruby reaches the final.

12b. True