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 understanding of changing fractions into percentages, where the denominator is 10 and 100.
Expected Questions to support understanding of changing fractions into percentages, where the denominator is 10, 20, 25 or 50.
Greater Depth Questions to support understanding of changing fractions into percentages, where the denominator is 2, 4, 5, 10, 20, 25 or 50.

More Year 6 Percentages resources.

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

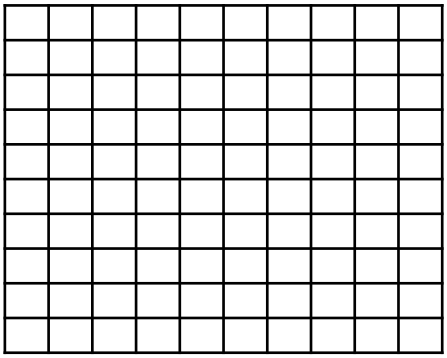
Fractions to Percentages

1a. Match the 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

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



D VF

3a. Which numbers are the same value?

$\frac{8}{10}$ $\frac{10}{100}$ $\frac{7}{10}$

$\frac{1}{10}$ 70% 10%

80% $\frac{70}{100}$ $\frac{80}{100}$

D VF

4a. True or false?

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

D VF

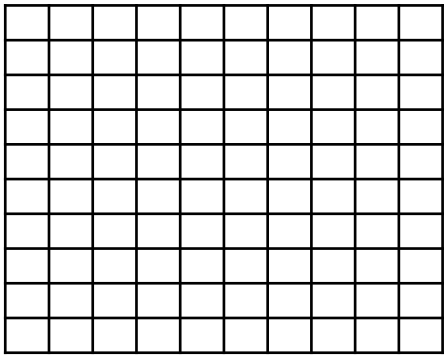
Fractions to Percentages

1b. Match the 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

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



D VF

3b. Which numbers are the same value?

$\frac{30}{100}$ $\frac{2}{10}$ $\frac{90}{100}$

$\frac{3}{10}$ 90% 30%

20% $\frac{20}{100}$ $\frac{9}{10}$

D VF

4b. True or false?

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

D VF

Fractions to Percentages

5a. Match the fractions to the correct percentages.

$\frac{1}{10}$	$\frac{5}{100}$	20%
$\frac{26}{50}$	$\frac{10}{100}$	52%
$\frac{1}{20}$	$\frac{20}{100}$	5%
$\frac{5}{25}$	$\frac{52}{100}$	10%

E VF

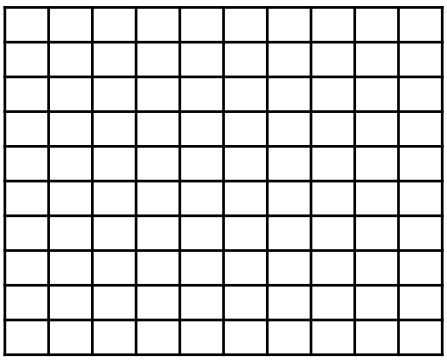
Fractions to Percentages

5b. Match the fractions to the correct percentages.

$\frac{6}{25}$	$\frac{18}{100}$	70%
$\frac{5}{20}$	$\frac{24}{100}$	18%
$\frac{9}{50}$	$\frac{70}{100}$	25%
$\frac{7}{10}$	$\frac{25}{100}$	24%

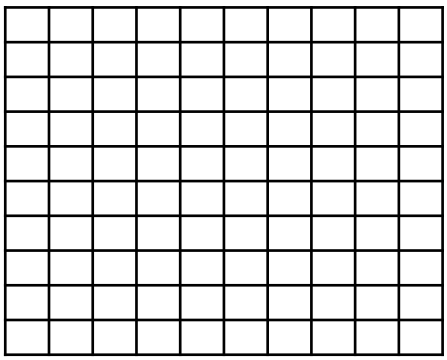
E VF

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



E VF

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



E VF

7a. Which numbers are the same value?

$\frac{4}{10}$ $\frac{15}{20}$ $\frac{40}{100}$

$\frac{11}{20}$ 40% 55%

75% $\frac{75}{100}$ $\frac{55}{100}$

E VF

7b. Which numbers are the same value?

$\frac{8}{25}$ $\frac{3}{10}$ $\frac{19}{20}$

$\frac{95}{100}$ 32% 95%

30% $\frac{32}{100}$ $\frac{30}{100}$

E VF

8a. True or false?

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

E VF

8b. True or false?

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

E VF

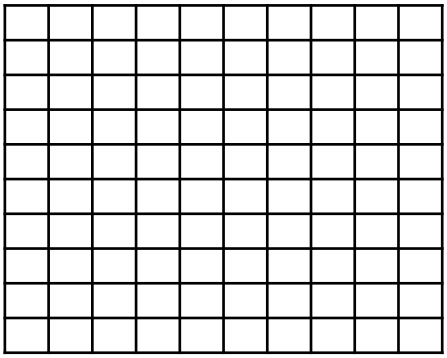
Fractions to Percentages

9a. Match the fractions to the correct percentages.

$\frac{3}{4}$	$\frac{40}{100}$	60%
$\frac{3}{5}$	$\frac{68}{100}$	75%
$\frac{17}{25}$	$\frac{75}{100}$	40%
$\frac{4}{10}$	$\frac{60}{100}$	68%

GD VF

10a. Shade the squares to show $\frac{2}{5}$ and write as a percentage.



GD VF

11a. Which numbers are the same value?

$\frac{6}{25}$ $\frac{4}{5}$ $\frac{74}{100}$ $\frac{37}{50}$ 74% 24% 80% $\frac{24}{100}$ $\frac{80}{100}$

GD VF

12a. True or false?

$\frac{13}{20}$ is equivalent to 64%

GD VF

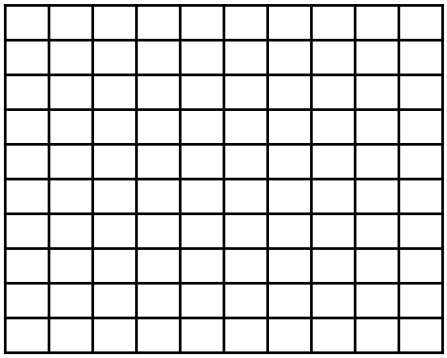
Fractions to Percentages

9b. Match the fractions to the correct percentages.

$\frac{13}{20}$	$\frac{80}{100}$	20%
$\frac{2}{10}$	$\frac{76}{100}$	80%
$\frac{4}{5}$	$\frac{20}{100}$	65%
$\frac{19}{25}$	$\frac{65}{100}$	76%

GD VF

10b. Shade the squares to show $\frac{3}{5}$ and write as a percentage



GD VF

11b. Which numbers are the same value?

$\frac{70}{100}$ $\frac{75}{100}$ $\frac{3}{4}$ $\frac{16}{25}$ 70% 64% 75% $\frac{64}{100}$ $\frac{14}{20}$

GD VF

12b. True or false?

$\frac{41}{50}$ is equivalent to 83%

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. $\frac{8}{10} = \frac{80}{100} = 80\%$, $\frac{1}{10} = \frac{10}{100} = 10\%$, $\frac{7}{10} = \frac{70}{100} = 70\%$

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

Expected

5a. $\frac{1}{10} = \frac{10}{100} = 10\%$, $\frac{26}{50} = \frac{52}{100} = 52\%$, $\frac{1}{20} = \frac{5}{100} = 5\%$, $\frac{5}{25} = \frac{20}{100} = 20\%$

6a. 30 squares shaded = 30%

7a. $\frac{4}{10} = \frac{40}{100} = 40\%$, $\frac{11}{20} = \frac{55}{100} = 55\%$, $\frac{15}{20} = \frac{75}{100} = 75\%$

8a. True

Greater Depth

9a. $\frac{3}{4} = \frac{75}{100} = 75\%$, $\frac{3}{5} = \frac{60}{100} = 60\%$, $\frac{17}{25} = \frac{68}{100} = 68\%$, $\frac{4}{10} = \frac{40}{100} = 40\%$

10a. 40 squares shaded = 40%

11a. $\frac{6}{25} = \frac{24}{100} = 24\%$, $\frac{37}{50} = \frac{74}{100} = 74\%$, $\frac{4}{5} = \frac{80}{100} = 80\%$

12a. False, $\frac{13}{20}$ is 64%.

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. $\frac{2}{10} = \frac{20}{100} = 20\%$, $\frac{3}{10} = \frac{30}{100} = 30\%$, $\frac{9}{10} = \frac{90}{100} = 90\%$

4b. True

Expected

5b. $\frac{6}{25} = \frac{24}{100} = 24\%$, $\frac{5}{20} = \frac{25}{100} = 25\%$, $\frac{9}{50} = \frac{18}{100} = 18\%$, $\frac{7}{10} = \frac{70}{100} = 70\%$

6b. 36 squares shaded = 36%

7b. $\frac{8}{25} = \frac{32}{100} = 32\%$, $\frac{3}{10} = \frac{30}{100} = 30\%$, $\frac{19}{20} = \frac{95}{100} = 95\%$

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

Greater Depth

9b. $\frac{13}{20} = \frac{65}{100} = 65\%$, $\frac{2}{10} = \frac{20}{100} = 20\%$, $\frac{4}{5} = \frac{80}{100} = 80\%$, $\frac{19}{25} = \frac{76}{100} = 76\%$

10b. 60 squares shaded = 60%

11b. $\frac{14}{20} = \frac{70}{100} = 70\%$, $\frac{3}{4} = \frac{75}{100} = 75\%$, $\frac{16}{25} = \frac{64}{100} = 64\%$

12b. False, $\frac{41}{50}$ is 83%.