Varied Fluency
Step 2: Equivalent FDP

National Curriculum Objectives:

Mathematics Year 6: (6F6) Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]

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

Differentiation:

Developing Questions to support finding equivalent fractions, decimals and percentages. Using hundredths, tenths, quarters and halves. Fractions may need to be simplified.

Expected Questions to support finding equivalent fractions, decimals and percentages. Using fifths, eighths, tenths, hundredths, quarters and halves. Fractions may need to be simplified.

Greater Depth Questions to support finding equivalent fractions, decimals and percentages. Using fifths, eighths, tenths, twentieths, hundredths, quarters and halves, or multiples of these fractions. Fractions may need to be simplified.

More Year 6 Percentages resources.

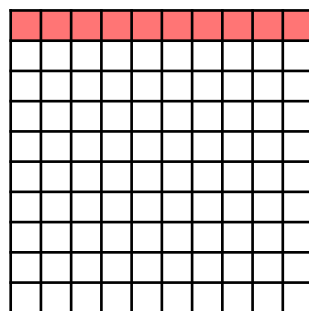Did you like this resource? Don't forget to review it on our website.

Equivalent FDP

Equivalent FDP

1a. Use the shaded part of the 100 square to write an equivalent fraction, decimal and percentage.
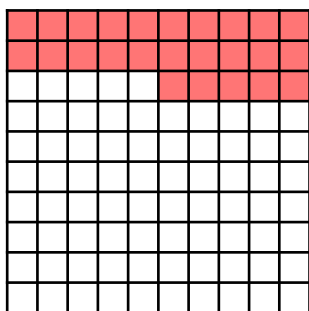
VF

1b. Use the shaded part of the 100 square to write an equivalent fraction, decimal and percentage.

VF

2a. Fill in the missing numbers.

$$\frac{\boxed{}}{10} = \boxed{} = 90\%$$

VF

2b. Fill in the missing numbers.

$$\frac{\boxed{}}{2} = \boxed{} = 50\%$$

VF

3a. Convert the following decimals to their equivalent percentages and fractions.

Display each fraction in its simplest form.

A. 0.1

B. 0.5

C. 0.25

VF

3b. Convert the following decimals to their equivalent percentages and fractions.

Display each fraction in its simplest form.

A. 0.3

B. 0.75

C. 0.9

VF

4a. Circle the odd one out.

$$\frac{3}{10} \quad 0.03 \quad 30\%$$

VF

4b. Circle the odd one out.
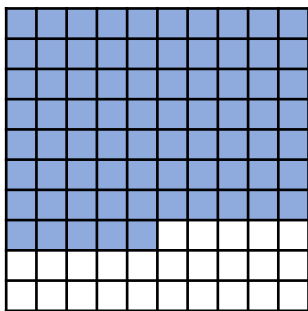
$$\frac{2}{4} \quad 0.5 \quad 20\%$$

VF

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Varied Fluency – Equivalent FDP – Year 6 Developing
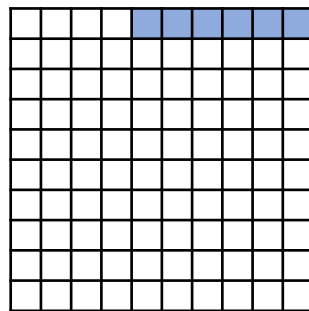
Equivalent FDP

Equivalent FDP

5a. Use the shaded part of the 100 square to write an equivalent fraction, decimal and percentage.

VF

5b. Use the shaded part of the 100 square to write an equivalent fraction, decimal and percentage.

VF

6a. Fill in the missing numbers.

$$\frac{\square}{5} = \square = 60\%$$

VF

6b. Fill in the missing numbers.

$$\frac{\square}{100} = \square = 11\%$$

VF

7a. Convert the following decimals to their equivalent percentages and fractions.

Display each fraction in its simplest form.

A. 0.125

B. 0.2

C. 0.6

VF

7b. Convert the following decimals to their equivalent percentages and fractions.

Display each fraction in its simplest form.

A. 0.375

B. 0.8

C. 0.48

VF

8a. Which conversion is incorrect?

A. $\frac{7}{10}$ = 0.7

B. 0.6 = 60%

C. 7% = $\frac{7}{10}$

VF

8b. Which conversion is incorrect?

A. $\frac{7}{8}$ = 0.875
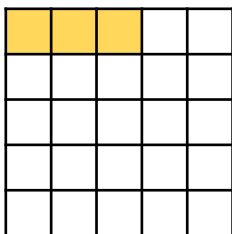
B. 75% = $\frac{4}{5}$

C. 0.8 = $\frac{80}{100}$

VF

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Varied Fluency – Equivalent FDP – Year 6 Expected

9a. Use the shaded part of the square to write an equivalent fraction, decimal and percentage.
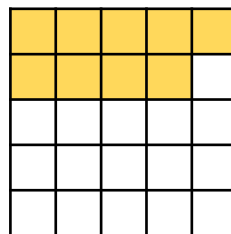
Display your fraction in its simplest form.

VF

9b. Use the shaded part of the square to write an equivalent fraction, decimal and percentage.

Display your fraction in its simplest form.

VF

10a. Fill in the missing numbers and comparison symbol.

$$\frac{\square}{20} = \square = 85\% \;\square\; \frac{4}{5} = \square = \square$$

VF

10b. Fill in the missing numbers and comparison symbol.

$$\frac{\square}{8} = \square = 75\% \;\square\; \frac{13}{20} = \square = \square$$

VF

11a. David is playing a video game and has recorded his scores as decimals.

Help him to convert the following decimal numbers in order to work out his scores in percentages and fractions in their simplest form.

A. 0.375

B. 0.09

C. 0.35

VF

11b. Kyra is answering some questions in class.

Help her to convert the following decimal numbers in order to work out their equivalent percentages and fractions in their simplest form.

A. 0.03

B. 0.95

C. 0.12

VF

12a. Which conversion is incorrect?

A. $\frac{7}{20} = 0.35$

B. $0.875 = 87.5\%$

C. $7.5\% = \frac{75}{100}$

VF

12b. Which conversion is incorrect?

A. $\frac{3}{5} = 0.6$

B. $40\% = \frac{6}{20}$

C. $0.375 = 37.5\%$

VF

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Varied Fluency – Equivalent FDP – Year 6 Greater Depth

Varied Fluency
Equivalent FDP

Developing

1a. $\frac{1}{4}$, 0.25, 25%

2a. $\frac{9}{10}$, 0.9

3a. A. $\frac{1}{10}$, 10%

B. $\frac{1}{2}$, 50%

C. $\frac{1}{4}$, 25%

4a. 0.03 is the odd one out because it is not equivalent to $\frac{3}{10}$ or 30%.

Developing

1b. $\frac{1}{10}$, 0.1, 10%

2b. $\frac{1}{2}$, 0.5

3b. A. $\frac{3}{10}$, 30%

B. $\frac{3}{4}$, 75%

C. $\frac{9}{10}$, 90%

4b. 20% is the odd one out because it is not equivalent to $\frac{2}{4}$ or 0.5.

Expected

5a. $\frac{3}{4}$, 0.75, 75%

6a. $\frac{3}{5}$, 0.6

7a. A. $\frac{1}{8}$, 12.5%

B. $\frac{1}{5}$, 20%

C. $\frac{3}{5}$, 60%

8a. C is the odd one out because the conversion is incorrect. 7% should be converted to $\frac{7}{100}$, not $\frac{7}{10}$.

Expected

5b. $\frac{6}{100}$, 0.06, 6%

6b. $\frac{11}{100}$, 0.11

7b. A. $\frac{3}{8}$, 37.5%

B. $\frac{4}{5}$, 80%

C. $\frac{48}{100} = \frac{12}{25}$, 48%

8b. B is the odd one out because the conversion is incorrect. 75% should be converted to $\frac{3}{4}$, not $\frac{4}{5}$.

Greater Depth

9a. $\frac{3}{25}$, 0.12, 12%

10a. $\frac{17}{20}$, 0.85, >, 0.8, 80%

11a. A. $\frac{3}{8}$, 37.5%

B. $\frac{9}{100}$, 9%

C. $\frac{35}{100} = \frac{7}{20}$, 35%

12a. C is the odd one out because the conversion is incorrect. $\frac{75}{100}$ should be converted to 75%, not 7.5%.

Greater Depth

9b. $\frac{9}{25}$, 0.36, 36%

10b. $\frac{6}{8}$, 0.75, <, 0.65, 65%

11b. A. $\frac{3}{100}$, 3%

B. $\frac{95}{100} = \frac{19}{20}$, 95%

C. $\frac{12}{100} = \frac{3}{25}$, 12%

12b. B is the odd one out because the conversion is incorrect. 40% should be converted to $\frac{4}{10}$ (in its simplest form), not $\frac{6}{20}$.

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Varied Fluency – Equivalent FDP ANSWERS