Homework/Extension
Step 6: Halves and Quarters

National Curriculum Objectives:

Mathematics Year 4: (4F6a) Recognise and write decimal equivalents to 1/4 , 1/2 , 3/4

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Match the fraction with the correct representation and decimal equivalent when using halves and quarters. The whole remains the same.
Expected Match the fraction with the correct representation and decimal equivalent when using halves and quarters.
Greater Depth Match the fraction with the correct representation and decimal equivalent when using halves and quarters. Equivalent fractions are used.

Questions 2, 5 and 8 (Varied Fluency)
Developing Identify what fraction of the hundred square is shaded when given two options.
Expected Identify what fraction of the hundred square is shaded when given three options.
Greater Depth Identify what fraction of the hundred square is shaded. Some fractions are simplified.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Explain whether a statement is correct when using halves and quarters written as decimals and fractions.
Expected Explain whether a statement is correct when using halves and quarters written as decimals, fractions and words.
Greater Depth Explain whether a statement is correct when using halves and quarters written as decimals, fractions and words. Some equivalent fractions are used.
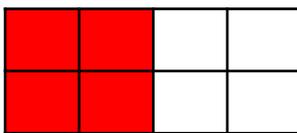
More Year 4 Decimals resources.

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

Halves and Quarters

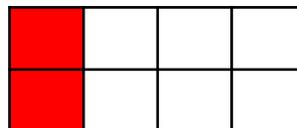**1. Match the fraction to the correct representation and decimal.**
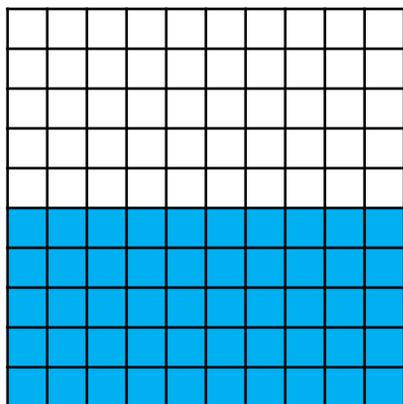
$$\frac{3}{4}$$

$$\frac{1}{2}$$

$$\frac{1}{4}$$

0.5

0.25

0.75

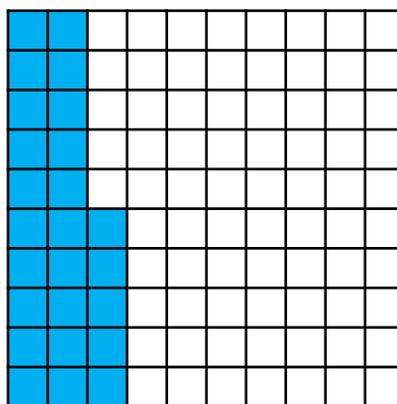**2. Circle the fraction that is shaded on each hundred square below.**

A.

$$\frac{40}{100}$$

$$\frac{50}{100}$$

B.

$$\frac{75}{100}$$

$$\frac{25}{100}$$

3. The table below shows how much cake was eaten by guests at Milo's birthday party.

Milo says,

Bob ate the most cake.

Is he correct? Explain how you know.

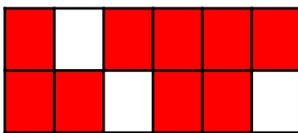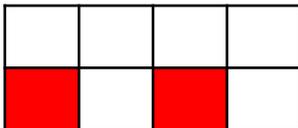| Name of guest	Amount of cake eaten
Ben	$\frac{1}{2}$
Bob	0.25
Barbara	$\frac{1}{4}$

Halves and Quarters

4. Match the fraction to the correct representation and decimal.

$$\frac{1}{2}$$
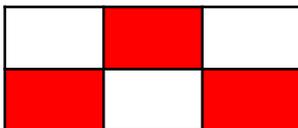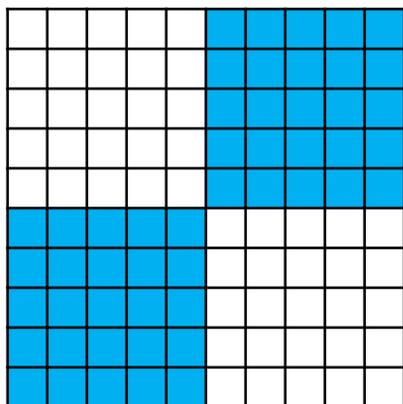
0.5

$$\frac{3}{4}$$

0.75

$$\frac{1}{4}$$

0.25

5. Circle the fraction that is shaded on each hundred square below.
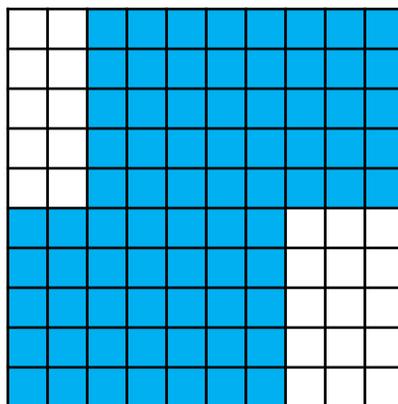
A.

$$\frac{40}{100}$$

$$\frac{25}{100}$$

$$\frac{50}{100}$$

B.

$$\frac{10}{100}$$

$$\frac{75}{100}$$

$$\frac{25}{100}$$

Which hundred square shows 0.5 shaded?

6. Jason gives each guest a cupcake at his party. The table below shows how much of each cake was eaten by each guest.

Jason says,

> Andrew ate the most cake.

Name of guest	Amount of cake eaten
Alex	$\frac{1}{4}$
Amy	0.75
Andrew	one half
Ayda	0.25

Is he correct? Explain how you know.

Which children ate one quarter of their cupcake?

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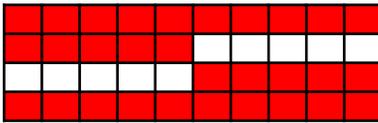**Homework/Extension – Halves and Quarters – Year 4 Expected**
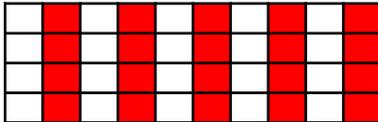
Halves and Quarters

7. Match the fraction to the correct representation and decimal.
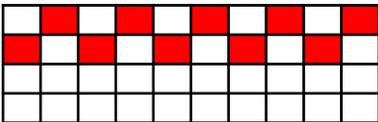
$$\frac{3}{6}$$
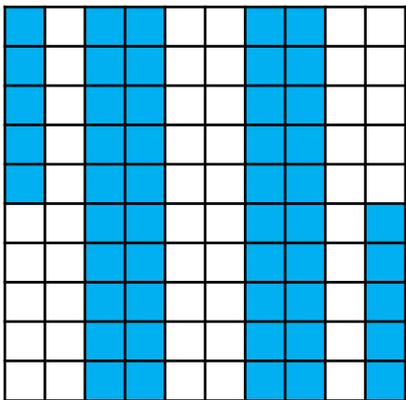

0.75

$$\frac{9}{12}$$

0.25

$$\frac{4}{16}$$

0.5

GD

VF
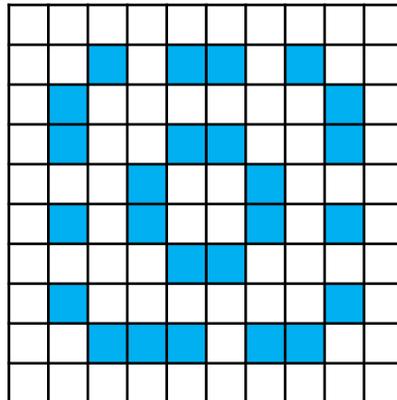HW/Ext

8. Circle the fraction that is shaded on each hundred square below.

A.

$$\frac{4}{10}$$

$$\frac{60}{100}$$

$$\frac{1}{2}$$

B.

$$\frac{10}{100}$$

$$\frac{4}{16}$$

$$\frac{40}{100}$$

Which hundred square shows 0.25 shaded?

GD

VF
HW/Ext

9. Alice gives each guest a cupcake at her party. The table below shows how much of each cake was eaten by each guest.

Alice says,

Casey ate more cake than Cody.

Name of guest	Amount of cake eaten
Claire	$\frac{9}{12}$
Callum	0.75
Cody	$\frac{5}{20}$
Casey	0.25

Is she correct? Explain how you know.

Which children ate more than half of their cupcake?

GD

RPS
HW/Ext

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Homework/Extension – Halves and Quarters – Year 4 Greater Depth

Developing

1.

$\frac{3}{4}$ → 0.75

$\frac{1}{2}$ → 0.5

$\frac{1}{4}$ → 0.25
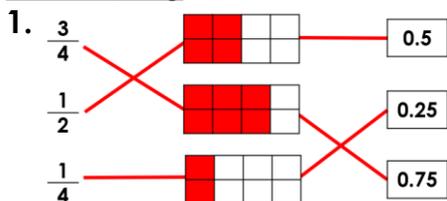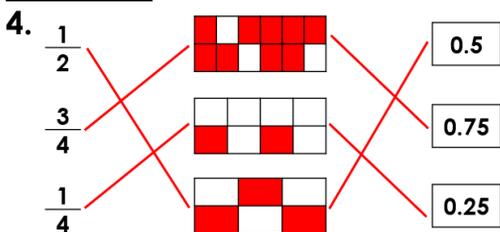
2. A = $\frac{50}{100}$ B = $\frac{25}{100}$

3. He is not correct. Ben ate the most because $\frac{1}{2}$ is the same as 0.5, which is greater than 0.25.
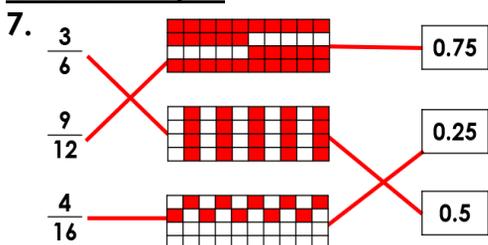
Expected

4.

$\frac{1}{2}$ → 0.5

$\frac{3}{4}$ → 0.75

$\frac{1}{4}$ → 0.25

5. A = $\frac{50}{100}$ B = $\frac{75}{100}$; A shows 0.5 (or one half) shaded.

6. He is not correct. Amy ate the most cake because she ate 0.75 which is greater than one half (or 0.5). Ayda and Alex ate one quarter of their cakes.

Greater Depth

7.

$\frac{3}{6}$ → 0.5

$\frac{9}{12}$ → 0.75

$\frac{4}{16}$ → 0.25

8. A = $\frac{1}{2}$ B = $\frac{4}{16}$; B shows 0.25 (or one quarter) shaded.

9. She is not correct. $\frac{5}{20}$ is the same as 0.25, so Cody and Casey both ate the same amount of cake. Callum and Claire ate more than half of their cakes because they both ate three quarters (or 0.75).