Reasoning and Problem Solving
Step 3: Equivalent Fractions 2

National Curriculum Objectives:

Mathematics Year 4: (4F2) Recognise and show, using diagrams, families of common equivalent fractions

Differentiation:

Questions 1, 4 and 7 (Reasoning)
Developing Identify and explain which fraction is the odd one out. Includes 3 options and doubling the starting fraction only.
Expected Identify and explain which fraction is the odd one out. Includes 6 options and denominators which are multiples of the starting fraction.
Greater Depth Identify and explain which fraction is the odd one out. Includes 6 options and denominators which share a common factor.

Questions 2, 5 and 8 (Problem Solving)
Developing Solve the word problem by working out if two fractions are equivalent. Includes doubling the starting fraction only.
Expected Solve the word problem by working out if three fractions are equivalent. Includes denominators which are multiples of the starting fraction.
Greater Depth Solve the word problem by working out if three fractions are equivalent. Includes denominators which share a common factor.

Questions 3, 6 and 9 (Reasoning)
Developing Explain which statement about an equivalent fraction is correct. Includes doubling the starting fraction only.
Expected Explain which statement about a sequence of equivalent fractions is correct. Includes denominators which are multiples of the starting fraction.
Greater Depth Explain which statement about a sequence of equivalent fractions is correct. Includes denominators which share a common factor.

More Year 4 Fractions resources.

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

Equivalent Fractions 2

1a. Circle the odd one out.

$\frac{2}{6}$ $\frac{1}{3}$ $\frac{2}{4}$

Explain your reasoning.

D R

Equivalent Fractions 2

1b. Circle the odd one out.

$\frac{2}{10}$ $\frac{3}{7}$ $\frac{1}{5}$

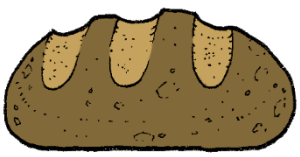
Explain your reasoning.

D R

2a. Ann and Tim are sharing some bread.

Ann eats $\frac{2}{8}$ of the bread.

Tim eats $\frac{1}{4}$.



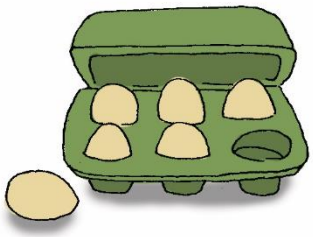
Did they both get an equal share?

D PS

2b. Kelly and Ivan are sharing some eggs.

Kelly eats $\frac{2}{6}$ of the eggs.

Ivan eats $\frac{1}{3}$.



Did they both get an equal share?

D PS

3a. Look at the fraction below.

$\frac{1}{5}$

Holly says,

$\frac{2}{10}$ is equivalent to this.

Josh says,

$\frac{2}{6}$ is equivalent to this.

Who is correct? Convinces me.

D R

3b. Look at the fraction below.

$\frac{1}{4}$

Bella says,

$\frac{2}{5}$ is equivalent to this.

Oscar says,

$\frac{2}{8}$ is equivalent to this.

Who is correct? Convince me.

D R

Equivalent Fractions 2

4a. Circle the odd one out.

$\frac{2}{10}$ $\frac{1}{5}$ $\frac{2}{6}$

$\frac{4}{20}$ $\frac{3}{15}$ $\frac{5}{25}$

Explain your reasoning.

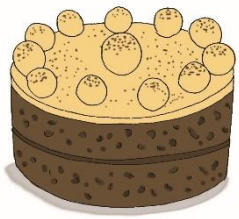
E R

5a. Lily, Ross and Ali are sharing a cake.

Lily eats $\frac{3}{12}$ of the cake.

Ross eats $\frac{1}{4}$.

Ali eats $\frac{4}{16}$.



Did everyone get an equal share?

E PS

6a. Look at the sequence below.

$\frac{1}{6}$, $\frac{2}{12}$, $\frac{3}{18}$

Tara says,

The next fraction is $\frac{4}{24}$.

Darren says,

The next fraction is $\frac{4}{19}$.

Who is correct? Convince me.

E R

Equivalent Fractions 2

4b. Circle the odd one out.

$\frac{2}{12}$ $\frac{5}{30}$ $\frac{3}{18}$

$\frac{4}{24}$ $\frac{2}{10}$ $\frac{1}{6}$

Explain your reasoning.

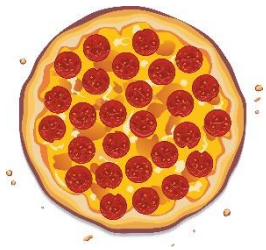
E R

5b. Kyra, Joe and Eva are sharing a pizza.

Kyra eats $\frac{3}{9}$ of the pizza.

Joe eats $\frac{4}{12}$.

Eva eats $\frac{1}{3}$.



Did everyone get an equal share?

E PS

6b. Look at the sequence below.

$\frac{1}{8}$, $\frac{2}{16}$, $\frac{3}{24}$

Kate says,

The next fraction is $\frac{4}{25}$.

Liam says,

The next fraction is $\frac{4}{32}$.

Who is correct? Convince me.

E R

Equivalent Fractions 2

7a. Circle the odd one out.

$\frac{4}{28}$ $\frac{8}{56}$ $\frac{6}{42}$

$\frac{7}{49}$ $\frac{3}{18}$ $\frac{5}{35}$

Explain your reasoning.

GD R

8a. Tia, Eli and Liz are sharing some mints.

Tia eats $\frac{4}{32}$ of the mints.

Eli eats $\frac{6}{48}$.

Liz eats $\frac{5}{35}$.

Did everyone get an equal share?

GD PS

9a. Look at the sequence below.

$\frac{6}{54}$, $\frac{7}{63}$, $\frac{8}{72}$

Anya says,

The next fraction is $\frac{9}{80}$.

Marvin says,

The next fraction is $\frac{9}{81}$.

Who is correct? Convince me.

GD R

Equivalent Fractions 2

7b. Circle the odd one out.

$\frac{8}{72}$ $\frac{6}{54}$ $\frac{4}{36}$

$\frac{5}{45}$ $\frac{7}{42}$ $\frac{3}{27}$

Explain your reasoning.

GD R

8b. Zoya, Max and Ted are sharing a pie.

Zoya eats $\frac{6}{36}$ of the pie.

Max eats $\frac{4}{40}$.

Ted eats $\frac{5}{30}$.

Did everyone get an equal share?

GD PS

9b. Look at the sequence below.

$\frac{6}{42}$, $\frac{7}{49}$, $\frac{8}{56}$

Nina says,

The next fraction is $\frac{9}{63}$.

Dan says,

The next fraction is $\frac{9}{62}$.

Who is correct? Convince me.

GD R

Reasoning and Problem Solving
Equivalent Fractions 2

Developing

1a. $\frac{2}{4}$ is the odd one out because it is not equivalent to the other fractions.

2a. Yes because $\frac{2}{8}$ and $\frac{1}{4}$ are equivalent fractions.

3a. Holly is correct. Children may prove this using a variety of methods, such as bar models.

Expected

4a. $\frac{2}{6}$ is the odd one out because it is not equivalent to the other fractions.

5a. Yes because $\frac{3}{12}$, $\frac{1}{4}$ and $\frac{4}{16}$ are equivalent fractions.

6a. Tara is correct because each number in the sequence is equivalent to $\frac{1}{6}$.

Greater Depth

7a. $\frac{3}{18}$ is the odd one out because it is not equivalent to the other fractions.

8a. No, Tia and Eli got $\frac{1}{8}$ and Liz got $\frac{1}{7}$.

9a. Marvin is correct because the fractions are all equivalent to $\frac{1}{9}$.

Reasoning and Problem Solving
Equivalent Fractions 2

Developing

1b. $\frac{3}{7}$ is the odd one out because it is not equivalent to the other fractions.

2b. Yes because $\frac{2}{6}$ and $\frac{1}{3}$ are equivalent fractions.

3b. Oscar is correct. Children may prove this using a variety of methods, such as bar models.

Expected

4b. $\frac{2}{10}$ is the odd one out because it is not equivalent to the other fractions.

5b. Yes because $\frac{3}{9}$, $\frac{4}{12}$ and $\frac{1}{3}$ are equivalent fractions.

6b. Liam is correct because each number in the sequence is equivalent to $\frac{1}{8}$.

Greater Depth

7b. $\frac{7}{42}$ is the odd one out because it is not equivalent to the other fractions.

8b. No, Zoya and Ted got $\frac{1}{6}$ and Max got $\frac{1}{10}$.

9b. Nina is correct because the fractions are all equivalent to $\frac{1}{7}$.