

Canonbury Home Learning
Year 4 Maths


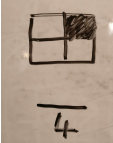

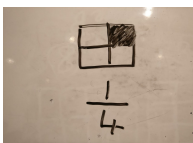
Lesson 15

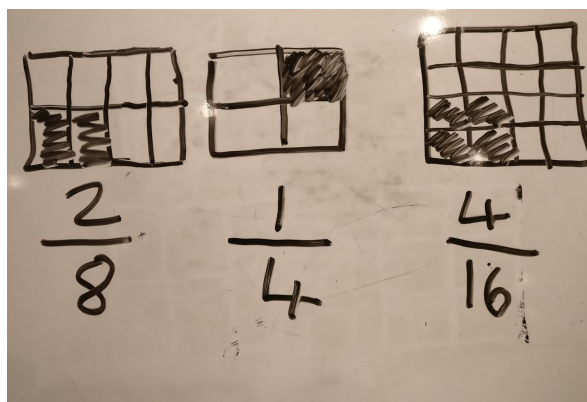
LO: To find equivalent fractions

Success Criteria:

1. Look at your shape
2. Count the total sections (This is your denominator)
3. Count the shaded sections (This is your numerator)
4. Write your fraction
5. Make an equivalent fraction

Model:

1.  2.  $\frac{1}{4}$ 3.  $\frac{1}{4}$ 4.  $\frac{1}{4}$ 5.



$\frac{2}{8}$ $\frac{1}{4}$ $\frac{4}{16}$



3 — Numerator
How many equal parts do you have?

4 — Denominator
How many equal parts is the whole divided into?

Year 4 Maths Main activity

Complete at least 2 columns, more if you can!

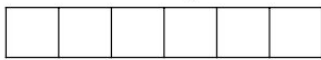
Task 1

Practice: Write the fraction, then make one that is equivalent.

1. Complete the diagrams to show equal fractions

$\frac{1}{4}$

$\frac{1}{3}$



$\frac{1}{4} = \frac{2}{8} = \frac{3}{12}$

$\frac{1}{3} = \frac{2}{6} = \frac{3}{9}$

2. Circle the fractions which are equivalent to

$\frac{1}{3}$

$\frac{1}{6}$

$\frac{2}{6}$ $\frac{4}{10}$ $\frac{4}{12}$ $\frac{4}{20}$ $\frac{3}{8}$ $\frac{2}{10}$
 $\frac{3}{9}$ $\frac{3}{6}$ $\frac{3}{15}$ $\frac{4}{12}$

3. Write a fraction which is equivalent to

$\frac{1}{5}$



I multiplied the numerator by ____.
I multiplied the denominator by ____.

Various answers, for example:

$\frac{2}{10}$, multiply by 2; $\frac{3}{15}$ multiply by 3

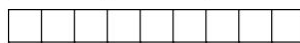
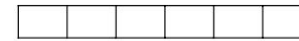
Task 2

Practice: Write the fraction, then make one that is equivalent.

1. Complete the diagrams to show equal fractions

$\frac{2}{6}$

$\frac{2}{12}$



$\frac{1}{3} = \frac{3}{9} = \frac{6}{18}$

$\frac{1}{6} = \frac{3}{18} = \frac{4}{24}$

2. Circle the fractions which are equivalent to

$\frac{4}{28}$

$\frac{3}{27}$

$\frac{5}{35}$ $\frac{1}{8}$ $\frac{3}{21}$ $\frac{4}{36}$ $\frac{6}{30}$ $\frac{5}{45}$
 $\frac{6}{30}$ $\frac{2}{14}$ $\frac{2}{18}$ $\frac{2}{26}$

3. Write two fractions which are equivalent to

$\frac{12}{20}$

$\frac{2}{10}$



I multiplied the numerator by ____.
I multiplied the denominator by ____.



I divided the numerator by ____.
I divided the denominator by ____.

Various answers, for example:

$\frac{3}{5}$, divide by 4; $\frac{24}{40}$ multiply by 2

<input type="checkbox"/>	I multiplied the numerator by ____.
<input type="checkbox"/>	I multiplied the denominator by ____.
<input type="checkbox"/>	I divided the numerator by ____.
<input type="checkbox"/>	I divided the denominator by ____.

Various answers, for example:
2/8 , multiply by 2; 3/12 multiply by 3

Various answers, for example:
3/5 , divide by 4; 24/40 multiply by 2

Task 3

Reasoning

Explain your answers.

6a. Fraser is looking at the fractions below.

$$\frac{1}{4} = \frac{9}{12}$$

The fractions are equivalent because 8 has been added to the numerator and the denominator.



Fraser

Is he correct? Convince me.

6a. Fraser is incorrect because the numerator and denominator need to be multiplied by 8 to be equivalent, rather than have 8 added.

9b. Phoebe is looking at the fractions below.

$$\frac{9}{12} = \frac{15}{20} = \frac{21}{28}$$

The fractions are all equal because they are equivalent to $\frac{6}{8}$.



Phoebe

Is she correct? Convince me.

9b. Phoebe is correct because all three fractions can be simplified to $\frac{3}{4}$ which is equivalent to $\frac{6}{8}$.

Task 4

Problem solving

1. Emile the Explorer is lost in the forest and needs some help to find her way through the maze. She can move horizontally or vertically to find her way home.



$\frac{2}{3}$	$\frac{12}{18}$	$\frac{8}{12}$	$\frac{6}{9}$	$\frac{14}{21}$	$\frac{48}{60}$	$\frac{32}{48}$	$\frac{6}{7}$
$\frac{4}{5}$	$\frac{24}{30}$	$\frac{36}{45}$	$\frac{16}{20}$	$\frac{4}{6}$	$\frac{18}{27}$	$\frac{16}{24}$	$\frac{10}{15}$
$\frac{6}{9}$	$\frac{32}{40}$	$\frac{12}{15}$	$\frac{40}{50}$	$\frac{28}{35}$	$\frac{8}{10}$	$\frac{44}{55}$	$\frac{20}{25}$
$\frac{5}{9}$	$\frac{40}{42}$	$\frac{55}{66}$	$\frac{30}{36}$	$\frac{11}{15}$	$\frac{15}{18}$	$\frac{50}{60}$	$\frac{35}{42}$
$\frac{5}{6}$	$\frac{20}{24}$	$\frac{14}{18}$	$\frac{10}{12}$	$\frac{45}{54}$	$\frac{25}{30}$	$\frac{8}{10}$	$\frac{3}{4}$

H
o
m
e

Explore the different routes that Ellie can take to find her way home, by following the path of equivalent fractions.

Various answers, one example shown on the maze above.