Year 3 Maths
Steppingstone activity

Lesson 37 LO: To count in fractions (halves)

1. Say the fractions out loud and listen to the pattern
2. Fill in the missing parts of the caterpillars, use the number line to help if you need.

0   $\frac{1}{2}$ 1 $1\frac{1}{2}$ 2 $2\frac{1}{2}$ 3 $3\frac{1}{2}$ 4 $4\frac{1}{2}$ 5
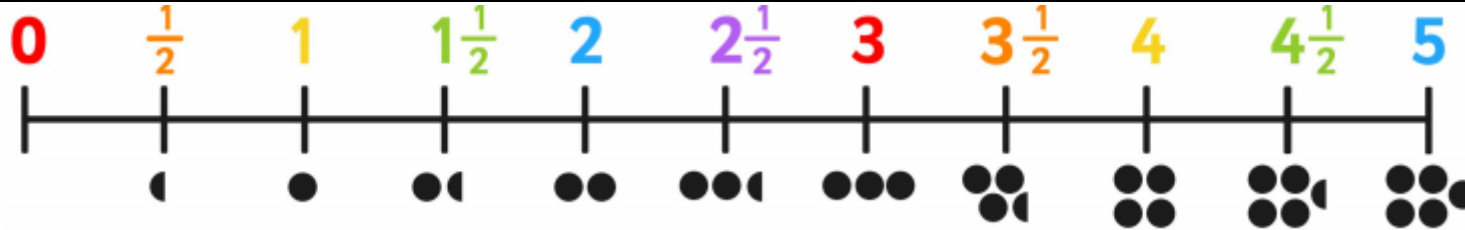
Model: Here is how we can count in halves:

$\frac{1}{2}$

1

$1\frac{1}{2}$

2

$2\frac{1}{2}$

Count the pizzas out loud.
Can you carry on counting in halves up to 5?

Now you try:

By counting in halves, fill in the missing numbers.

1. (1)($1\frac{1}{2}$)(2)($2\frac{1}{2}$)( )( )( )

2. ($6\frac{1}{2}$)(7)($7\frac{1}{2}$)(8)( )( )( )

3. ($\frac{1}{2}$)( )( )($2\frac{1}{2}$)(3)($3\frac{1}{2}$)

4. ( )( )(4)($4\frac{1}{2}$)( )( )( )

1. How many strawberries are there altogether? Can you count them in halves and fill in the missing numbers?

½ 1 1½ ◯ ◯ ◯ ◯ ◯
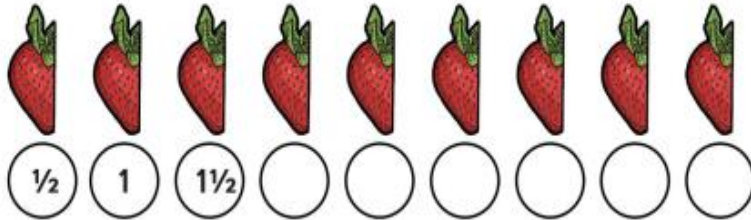
2. Each bottle has ½ pint of milk in it. How many pints of milk are there altogether? Can you count them in halves and fill in the missing numbers?

◯ ◯ ◯ 2 ◯ 3 ◯
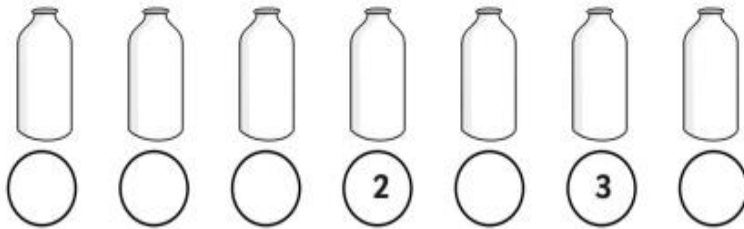
3. I have 10 donuts. I have cut them all in half and eat 6 halves. Can you cross out the donuts I eat and count back to show how many are left each time?

10 9½ 9 8½ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯
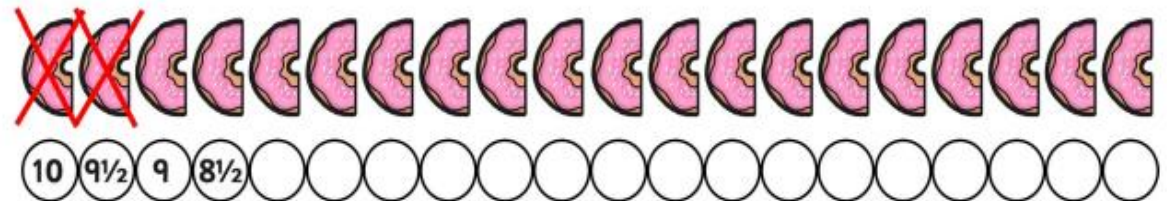
4. Rebecca Rabbit can hop ½ metre each time she hops. She takes 11 hops. How far has she travelled?

0 _ _ _ _ _ _ _ _ _ _ _

LO: To find equivalent fractions (continued)

Success Criteria:

Use the fraction wall on the last page to help with comparing fractions to find equivalents

1.	Look at the fractions and words in the grid
2.	Use them to help you colour the correct amount of each shape (the numerator will tell you this)
3.	Fill in any fractions or words which are still missing

Today we will be looking for patterns which help us spot equivalent fractions.

Model:

A fraction wall is helpful to use when finding equivalents.

$$\frac{1}{2} = \frac{2}{4} = \frac{4}{8} = \frac{6}{12}$$
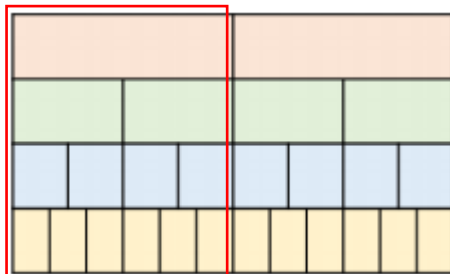
Do you notice a pattern in these equivalent fractions?

In equivalents of a half, the **denominator** is always **double the numerator**!
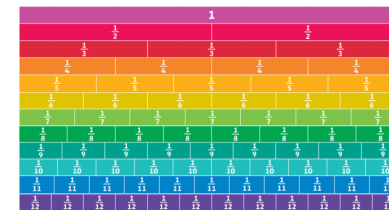
Use the fraction wall to fill in the missing denominators:

$$\frac{1}{4} = \frac{2}{\Box} = \frac{3}{\Box}$$

Now you try:
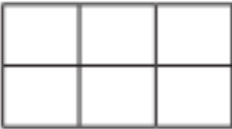
Complete the table. Can you spot any patterns?
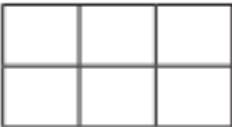
Pictorial representation	Fraction	Words
	$\frac{6}{8} = \frac{3}{4}$	Six eighths is equivalent to three quarters
	$\frac{1}{3} = \frac{\Box}{9}$	_____ is equivalent to _____
	$\frac{\Box}{4} = \frac{\Box}{12}$	Three twelfths is equivalent to _____ quarters
	$\frac{4}{12} = \frac{\Box}{\Box}$	_____ is equivalent to _____

Equivalent fractions (3)

1 Shade the shapes to help you complete the equivalent fractions.

a)

$\frac{1}{3} = \frac{\square}{\square}$

b)

$\frac{1}{2} = \frac{\square}{\square}$

c)

$\frac{3}{4} = \frac{\square}{\square}$

d)

$\frac{3}{4} = \frac{\square}{\square}$

2 Use the fraction wall to complete the equivalent fractions.

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

$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$

a) $\frac{1}{3} = \frac{\square}{6}$

b) $\frac{1}{3} = \frac{\square}{9}$

c) $\frac{2}{3} = \frac{4}{\square}$

d) $\frac{2}{3} = \frac{6}{\square}$

e) $\frac{4}{6} = \frac{6}{\square}$

f) $\frac{1}{3} = \frac{\square}{6} = \frac{\square}{9}$

3 Draw a picture to show that one quarter is equivalent to two eighths.
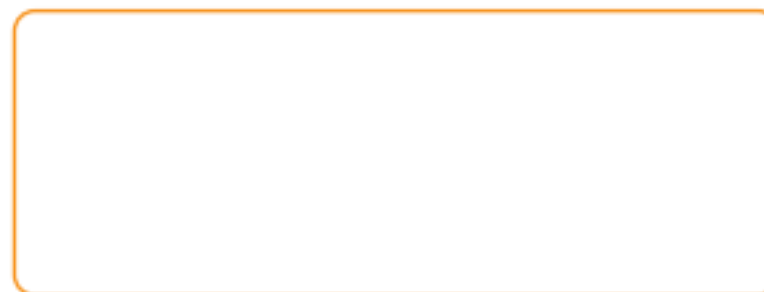
4 Use the fraction wall to decide whether the fractions are equivalent or not.

$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{5}$	$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	$\frac{1}{5}$	
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$
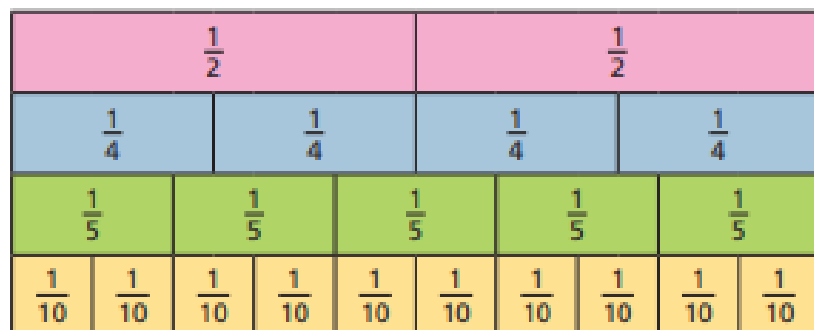
Complete the sentences using **is** or **is not**.

a) $\frac{1}{2}$ _____ equivalent to $\frac{2}{4}$

b) $\frac{1}{4}$ _____ equivalent to $\frac{2}{10}$

c) $\frac{1}{2}$ _____ equivalent to $\frac{5}{10}$

d) $\frac{3}{10}$ _____ equivalent to $\frac{2}{5}$

e) $\frac{4}{5}$ _____ equivalent to $\frac{8}{10}$

f) $\frac{3}{4}$ _____ equivalent to $\frac{4}{5}$

Write some sentences of your own and ask a partner to fill in the gaps.

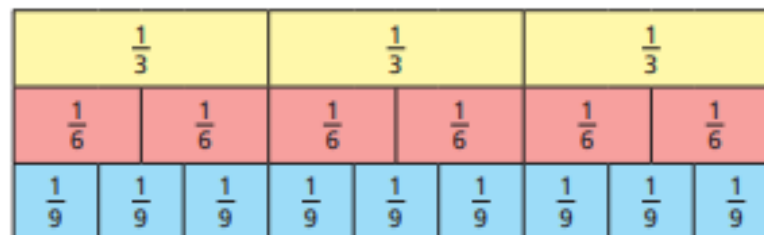**5** a) What fraction of each shape is shaded?

☐ ☐ ☐ ☐
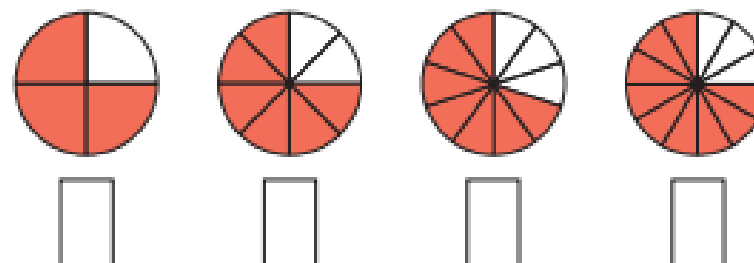
b) Use the fractions in part a) to complete the sentences.

☐ is equivalent to ☐

☐ is equivalent to ☐

☐ is not equivalent to ☐

☐ is not equivalent to ☐

Compare answers with a partner.

6 The bar model represents $\frac{1}{2}$

Write as many equivalent fractions as you can.

What is the same about all the fractions you have written?

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Use this fraction wall to help when comparing fractions to find equivalents:

1											
$\frac{1}{2}$						$\frac{1}{2}$					
$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$		
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$			
$\frac{1}{6}$	$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		
$\frac{1}{7}$	$\frac{1}{7}$	$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$		$\frac{1}{7}$	$\frac{1}{7}$		
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$		$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$			
$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$			
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$		
$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	$\frac{1}{11}$	
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$