

Unit and non-unit fractions



Read through the Extra Support Fractions explanation sheet. When you think you understand what a fraction is, start the questions below. If you need further support go online to

https://www.youtube.com/watch?v=n0FZhQ_GkKw

Remember to count how many there are in total (the denominator) and how many of each colour (the numerator) The denominator has been done in the first one for you.

1 Write fractions to complete the sentences.



a) $\frac{\boxed{}}{3}$ of the counters are yellow.

b) $\frac{\boxed{}}{3}$ of the counters are red.

2 Write fractions to complete the sentences.

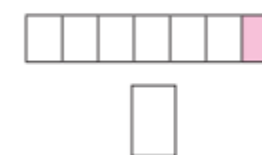
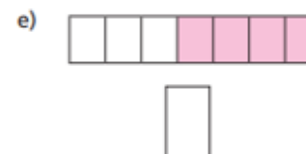
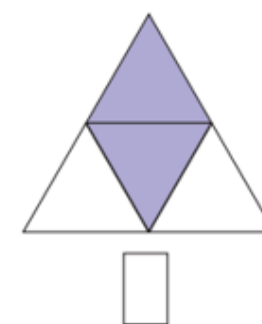
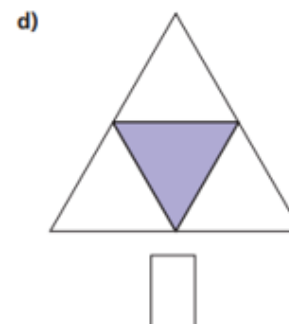
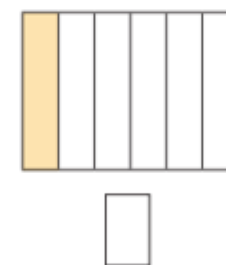
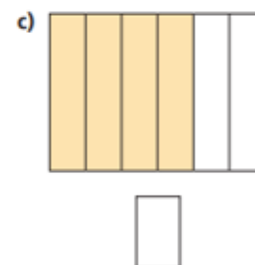
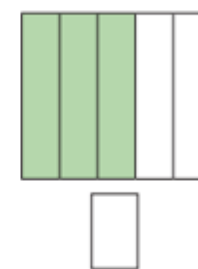
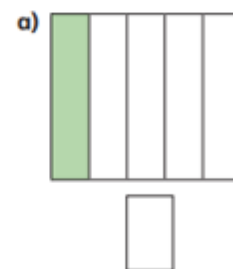
a) $\frac{\boxed{}}{}$ of the tower is green.

b) $\frac{\boxed{}}{}$ of the tower is yellow.

c) $\frac{\boxed{}}{}$ of the tower is blue.



3 What fraction of each shape is shaded?



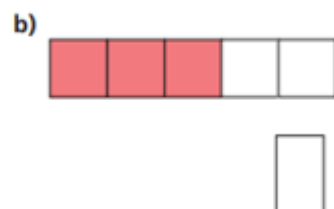
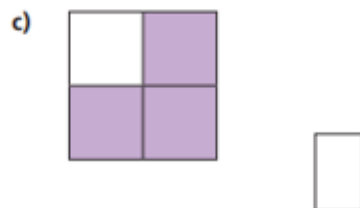
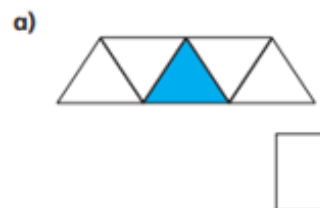
What is a fraction?

A fraction that has a 1 as its numerator is known as a unit fraction.

Circle the pictures below that show a unit fraction, then check your answers before moving on with today's work.



1 What fraction of each shape is shaded?



2 Shade each diagram to represent the fractions.



3 Circle the unit fractions.

$\frac{1}{3}$ $\frac{1}{5}$ $\frac{3}{5}$ $\frac{1}{8}$ $\frac{2}{3}$ $\frac{10}{11}$

How do you know which are unit fractions?

Use the word *numerator* in your explanation

Tenths



If an object is divided into ten then it has ten parts, each of which is called a tenth.

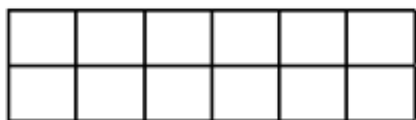
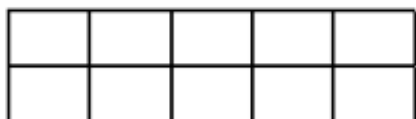


Here is an example

This rectangle has been divided into 10 parts

Each part is $\frac{1}{10}$ (one tenth) Altogether there are $\frac{10}{10}$ (ten tenths) which is the same as a whole.

1 Tick the pictures that show tenths.



2 Write fractions to complete the sentences.

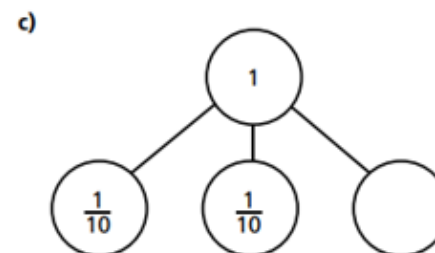
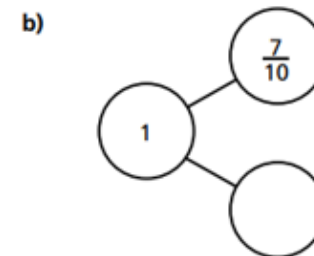
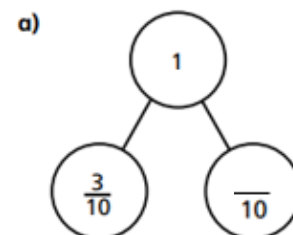


a) $\frac{\quad}{10}$ of the counters are yellow.

b) $\frac{\quad}{\quad}$ of the counters are red.

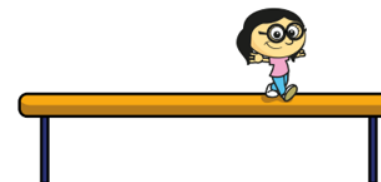
c) $\frac{\quad}{\quad}$ of the counters are green.

3 Complete the part-whole models.



Remember $\frac{10}{10} = 1$ whole

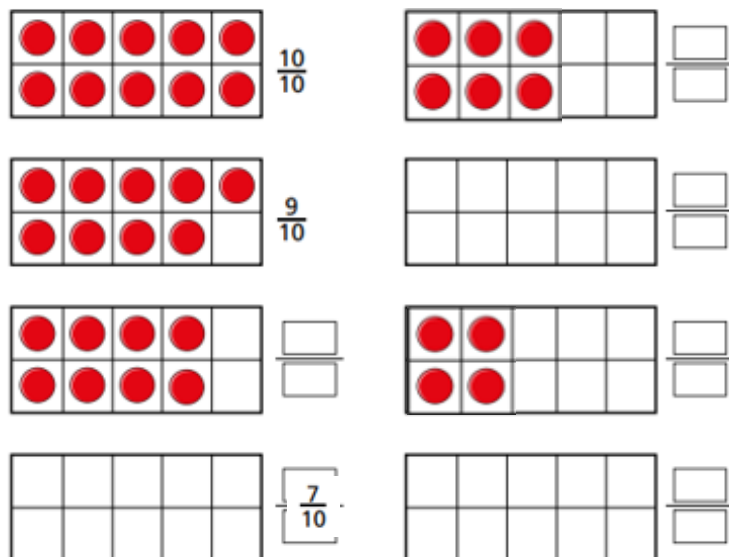
4 Annie has travelled $\frac{7}{10}$ of the way across a balance beam.



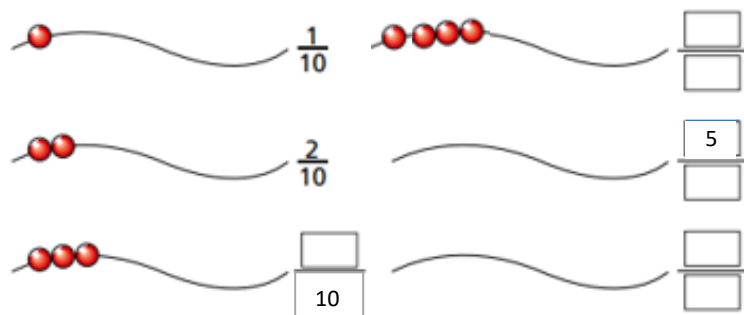
How many tenths does she have left to travel?

Count in tenths

- 1 Continue/complete the sequence by drawing the correct number of circles in the grid and writing the fraction alongside.

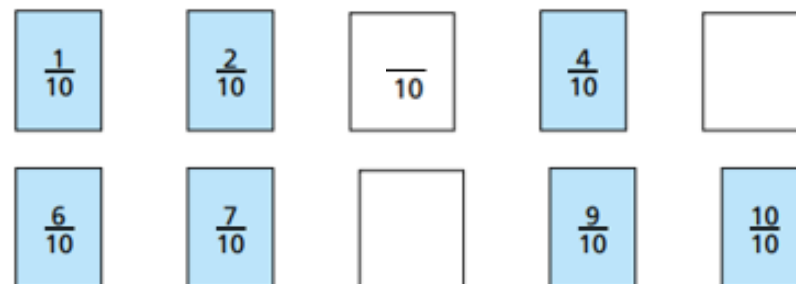


- 2 Continue the sequence.

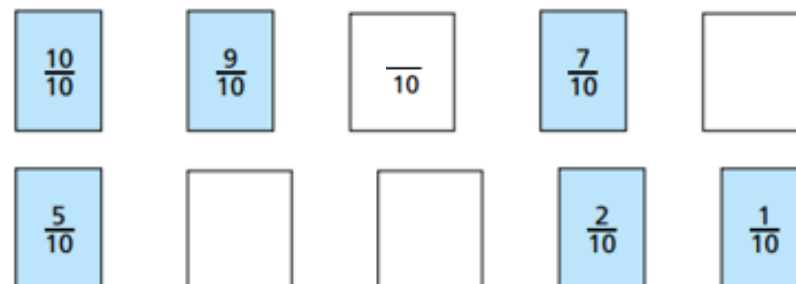


- 3 Write the missing fractions in each sequence.

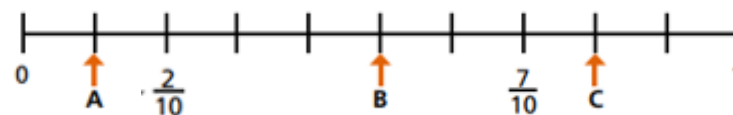
a)



b)



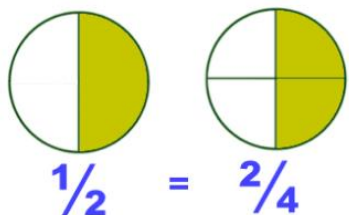
- 4 What fraction is each arrow pointing to?



A = $\frac{\quad}{\quad}$ B = $\frac{\quad}{\quad}$ C = $\frac{\quad}{\quad}$

Equivalent fractions (1)

When fractions have different numbers in them but have the same value, they are called equivalent fractions.



For example from this picture you can see that $\frac{1}{2}$ takes up the same space in the circle as $\frac{2}{4}$.

They have the same value so are equivalent fractions. Remember the top number (numerator) shows the Shaded part and the bottom number (denominator) shows the total number of parts.

1 Shade the bar models to represent the fractions.

a) Shade $\frac{1}{2}$ of the bar model.



b) Shade $\frac{2}{4}$ of the bar model.

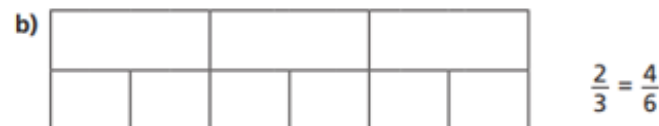
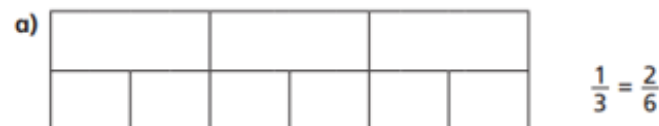


What do you notice?

2 Complete the equivalent fractions.



3 Shade the bar models to represent the equivalent fractions.



Day 1 Answers

Unit and non-unit fractions



1 Write fractions to complete the sentences.



a) $\frac{1}{3}$ of the counters are yellow.

b) $\frac{2}{3}$ of the counters are red.

2 Write fractions to complete the sentences.

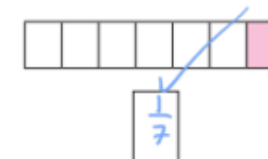
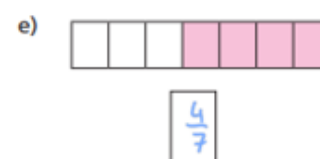
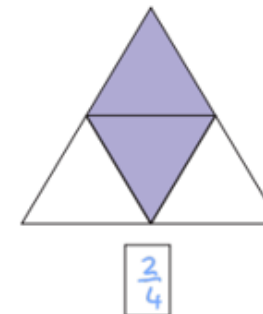
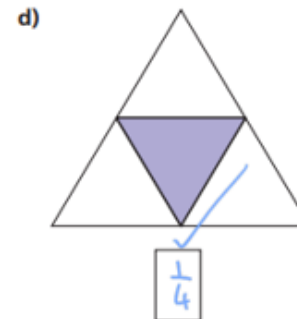
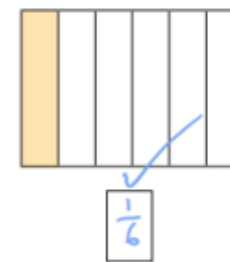
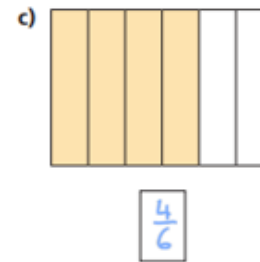
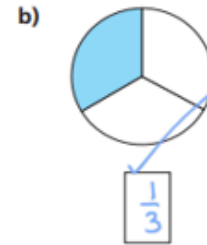
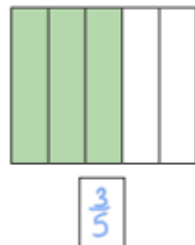
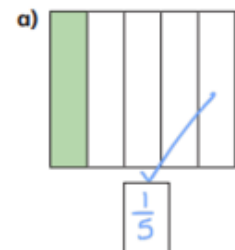
a) $\frac{3}{6}$ of the tower is green.

b) $\frac{2}{6}$ of the tower is yellow.

c) $\frac{1}{6}$ of the tower is blue.



3 What fraction of each shape is shaded?



Tick the unit fraction in each pair of shapes.

How did you know which was the unit fraction?



Day 2 answers

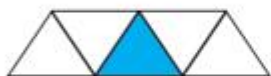


What is a fraction?

White
Rose
Maths

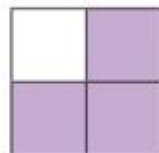
1 What fraction of each shape is shaded?

a)



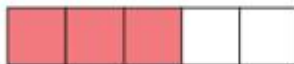
$$\frac{1}{5}$$

c)



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

b)



$$\frac{3}{5}$$

d)



$$\frac{4}{7}$$

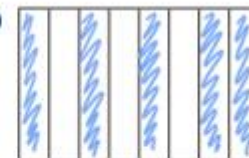
2 Shade each diagram to represent the fractions.

a)



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

c)



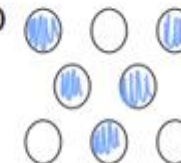
$$\frac{5}{8}$$

b)



$$\frac{5}{6}$$

d)



$$\frac{5}{8}$$

3 Circle the unit fractions.

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

$$\frac{1}{5}$$

$$\frac{3}{5}$$

$$\frac{1}{8}$$

$$\frac{2}{3}$$

$$\frac{10}{11}$$

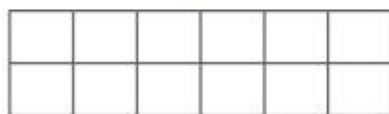
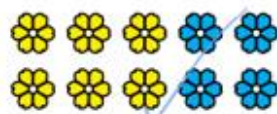
How do you know which are unit fractions?



Tenths



- 1 Tick the pictures that show tenths.



- 2 Write fractions to complete the sentences.



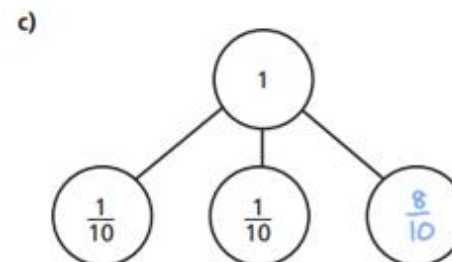
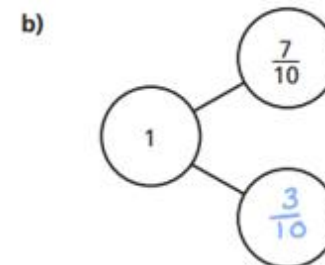
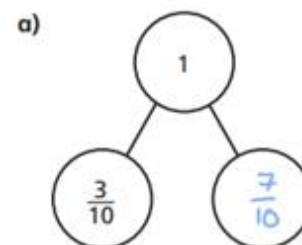
a) $\frac{3}{10}$ of the counters are yellow.

b) $\frac{6}{10}$ of the counters are red.

c) $\frac{1}{10}$ of the counters are green.

3

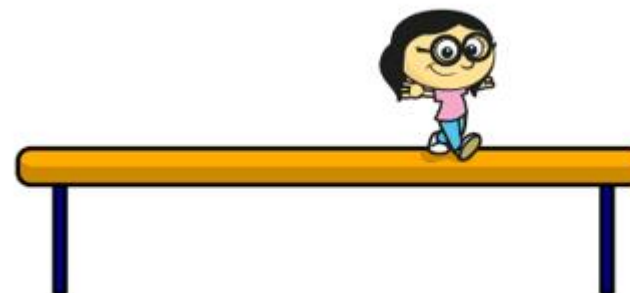
Complete the part-whole models.



© White Rose Maths 2019

4

Annie has travelled $\frac{7}{10}$ of the way across a balance beam.



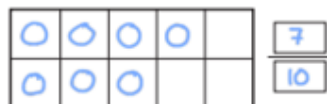
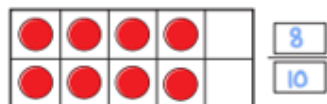
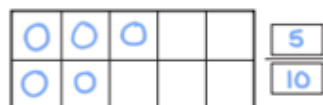
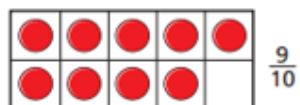
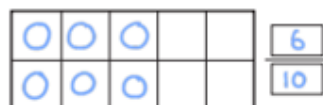
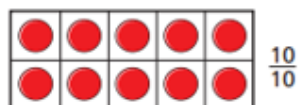
How many tenths does she have left to travel?

$\frac{3}{10}$

Count in tenths



1 Continue the sequence.



2 Continue the sequence.



3 Write the missing fractions in each sequence.

a)



b)



4 What fraction is each arrow pointing to?



$A = \frac{1}{10}$
 $B = \frac{5}{10}$
 $C = \frac{8}{10}$

Equivalent fractions (1)



- 1 Shade the bar models to represent the fractions.

a) Shade $\frac{1}{2}$ of the bar model.

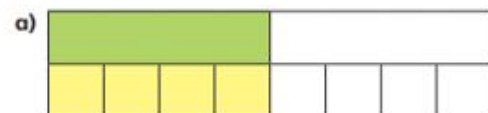


b) Shade $\frac{2}{4}$ of the bar model.



What do you notice?

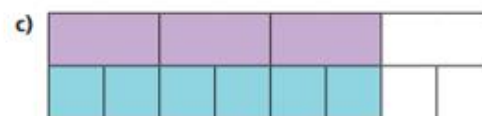
- 2 Complete the equivalent fractions.



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



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

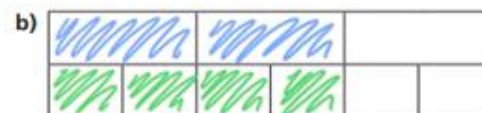


$$\frac{3}{4} = \frac{6}{8}$$

- 3 Shade the bar models to represent the equivalent fractions.



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



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

