

Miss Cole's Maths Group

Fractions

Write today's date and LO in your work book.

27.4.20

LO: To read and recognise unit and non-unit fractions

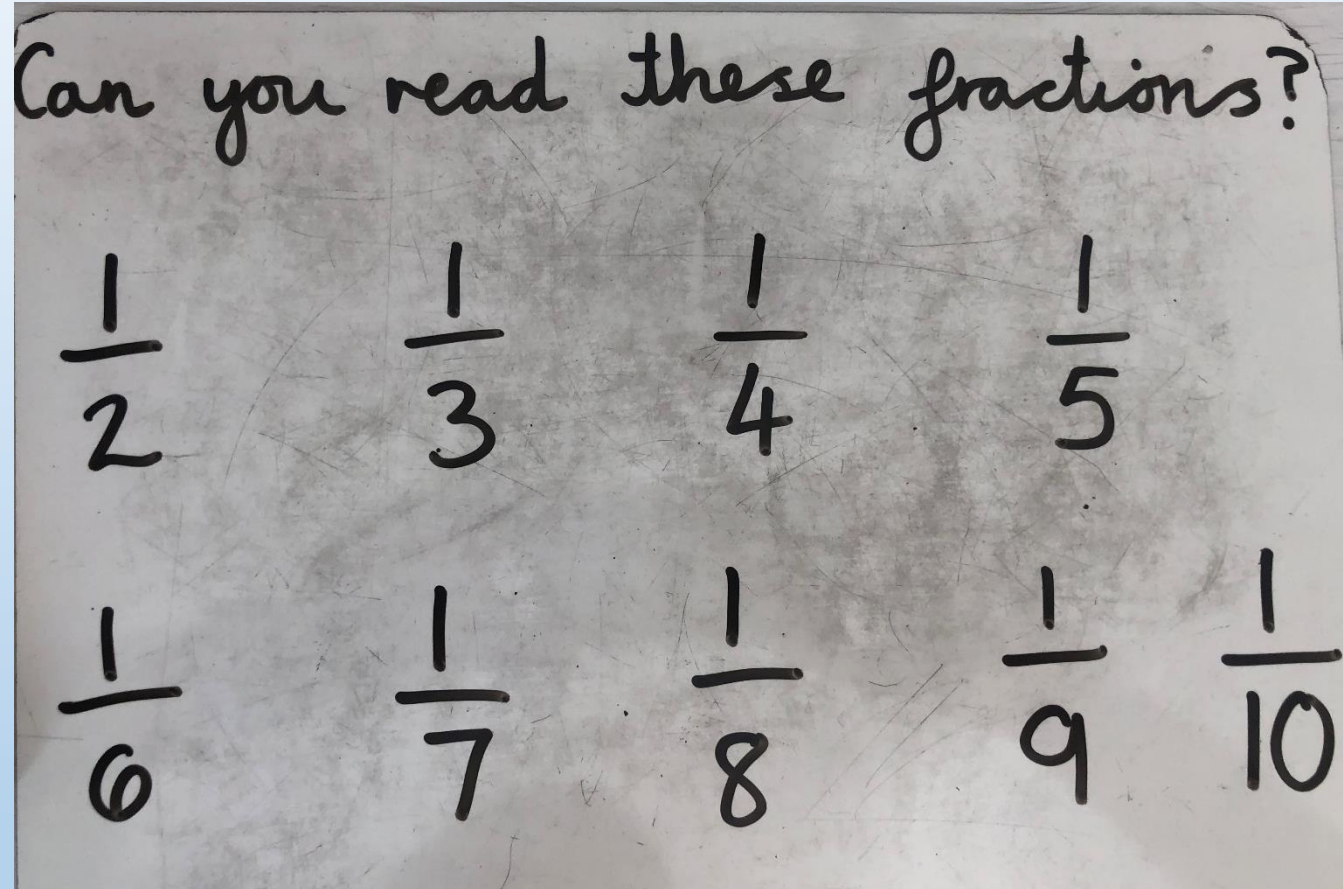
Starter:

Count in tens from 0 to 250 and record this in your book.

0, 10, 20, 30... Repeat, this time from 5 to 255. 5, 15, 25, 35...

Challenge – choose your own start number between 1-9. Repeat.

Starter:



What is the same about these fractions? What do you notice?

$$\frac{?}{2} = \text{half} / \text{halves}$$

$$\frac{?}{3} = \text{third} / \text{thirds}$$

$$\frac{?}{4} = \text{quarter} / \text{quarters}$$

$$\frac{?}{5} = \text{fifth} / \text{fifths}$$

$$\frac{?}{6} = \text{sixth} / \text{sixths}$$

$$\frac{?}{7} = \text{seventh} / \text{sevenths}$$

Remember the bottom number, the denominator, tells us how many parts make the whole. E.g. thirds are 3 equal parts.

$$\frac{?}{8} = \text{eighth} / \text{eighths}$$

$$\frac{?}{9} = \text{ninth} / \text{ninths}$$

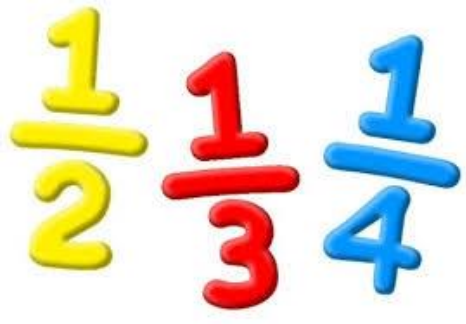
$$\frac{?}{10} = \text{tenth} / \text{tenths}$$

$$\frac{1}{3} = \text{one third} = \img alt="A 3D cube divided into three equal parts by diagonal planes." data-bbox="668 578 708 652"/>$$

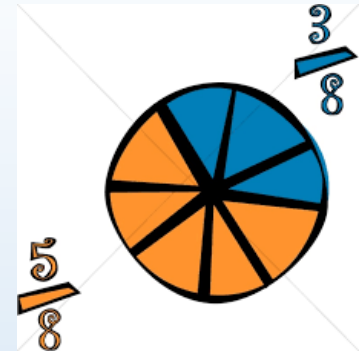
$$\frac{2}{3} = \text{two thirds} = \img alt="A 3D cube divided into three equal parts, with two parts shaded with diagonal lines." data-bbox="648 722 682 788"/>$$

Spend some time looking at these posters and familiarising yourself with the fraction names.

You could practise writing your own fractions and reading them out loud.



Fractions



Today we will be focusing on...

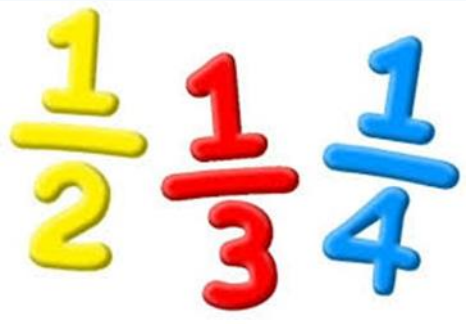
Click on the text to
watch the video
tutorial.

<https://www.youtube.com/watch?v=OvrRaYcSRYA>

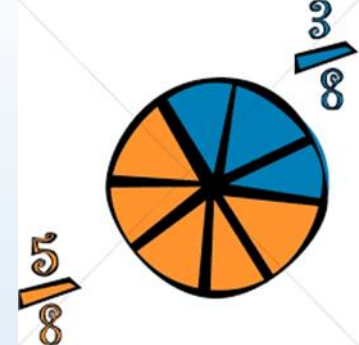
**UNIT AND
NON-UNIT
FRACTIONS**

0:03 / 1:11

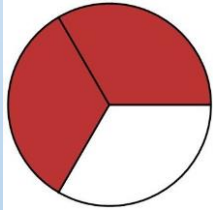


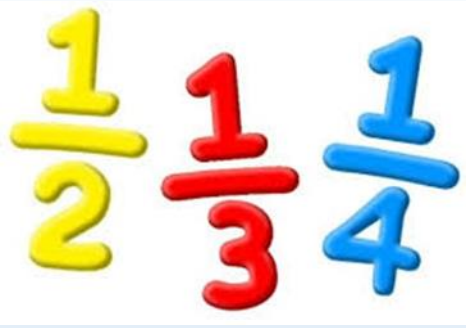


Fractions

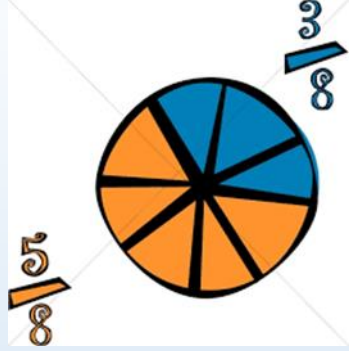


Key points:

- Fractions are **parts of a whole**.
- You can have fractions of number e.g. $\frac{1}{2}$ of 8 = 4
- You can have fractions of shape e.g. $\frac{2}{3}$ of a circle = 
- When you read a fraction e.g. $\frac{1}{4}$, you can also think of it as 4 parts make the whole, I have $\frac{1}{4}$ so I have 1 part out of 4...
- Or more simply: $\frac{1}{4}$ is 1 out of 4
- Further examples: $\frac{5}{8}$ is 5 out of 8; $\frac{7}{10}$ is 7 out of 10; $\frac{2}{5}$ is 2 out of 5.

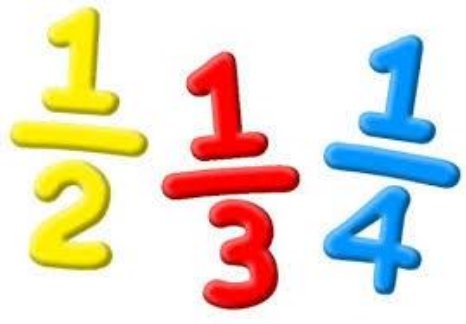


Fractions

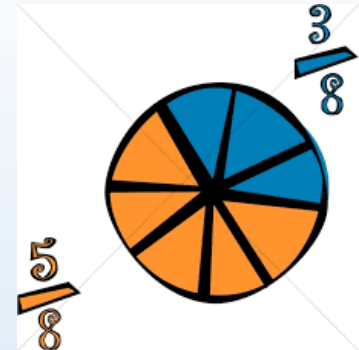


Key points:

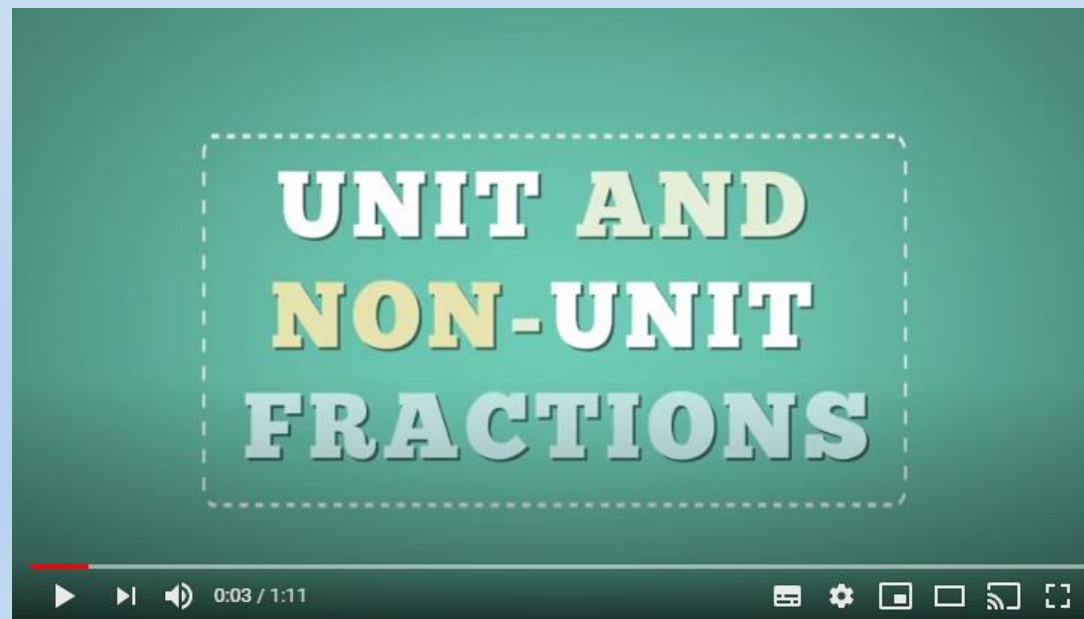
- The **top** number is known as a **numerator**. This number shows how many parts you have.
- The **bottom** number is known as a **denominator**. This number shows how many parts make up the whole.
- **Unit fractions** are when the **numerator is 1**.
- **Non-unit fractions** are when the **numerator is any other number except from 1**.



Fractions



Now you have recapped these key points, I recommend re-watching the video so you are confident. Once again, click on the text/picture below.



Challenge 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.

Example:

- a) 1 of the counters is yellow – 1 out of 3.
- b) 2 of the counters are red – 2 out of 3.

Now complete these statements in your book about the new picture.

Write fractions to complete the sentences.

- a) of the tower is green.
- b) of the tower is yellow.
- c) of the tower is blue.

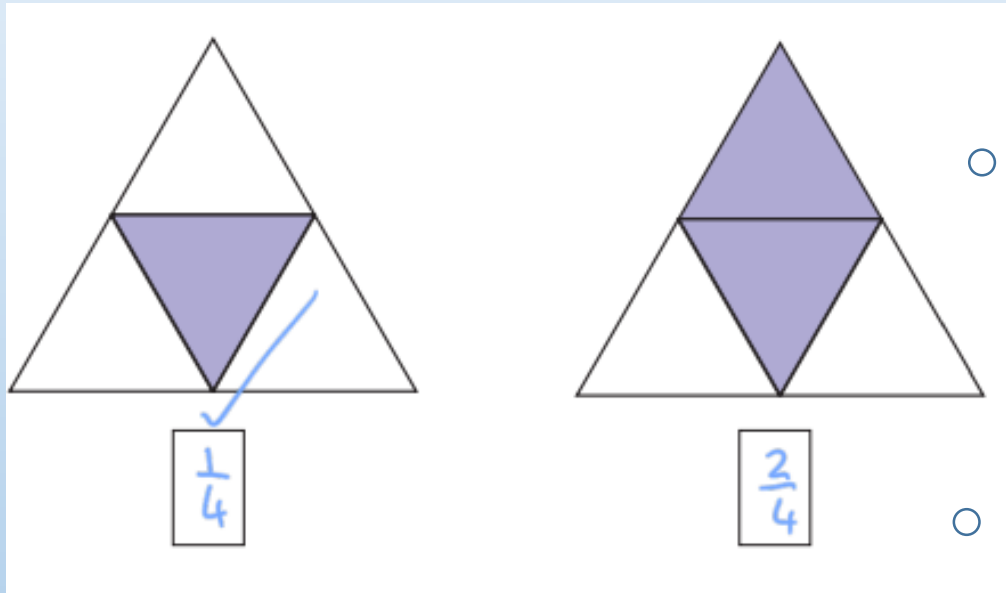


You can check your answers at the end

Challenge 2

Example:

What fraction of each shape is shaded?



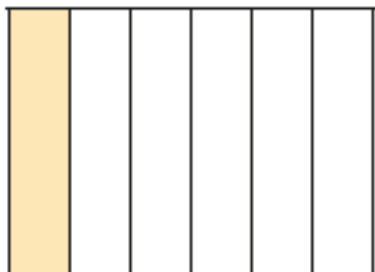
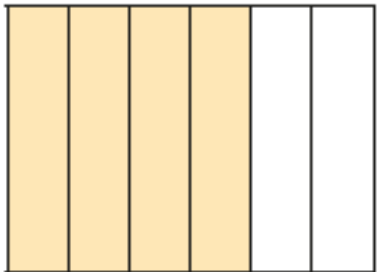
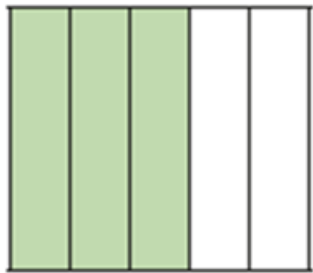
Stop and think...
Which of the two fractions is the unit fraction? Tick or circle the unit fraction.

Look back at the previous slides if you need to.

You can check your answers at the end

Challenge 2

What fraction of each shape is shaded?



Stop and think...
Which fractions are the unit fraction?
Circle your answers.



You can check your answers at the end

Challenge 3

Please draw the table in your work books, then add the fractions into the correct column.

Write the fractions in the table.

$\frac{1}{6}$

$\frac{2}{3}$

$\frac{3}{4}$

$\frac{1}{10}$

$\frac{1}{8}$

$\frac{3}{5}$

$\frac{1}{4}$

$\frac{1}{99}$

$\frac{6}{1}$

$\frac{1}{250}$

Unit fractions	Non-unit fractions

Write two more examples of your own in each column.

You can check your answers at the end

Challenge 4

a) What is a unit fraction? What is a non-unit fraction?

Talk about it with a partner.

b) Complete the sentences.

An example of a unit fraction is

The numerator is always

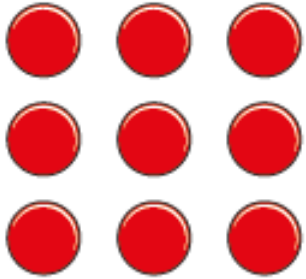
An example of a non-unit fraction is

The numerator is always greater than

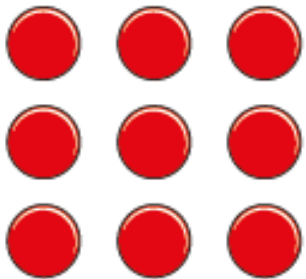
You can check your answers on the NEXT SLIDE

Optional – Extra Challenge

- 5 a) Circle $\frac{1}{3}$ of the counters.



- b) Circle $\frac{2}{3}$ of the counters.



What is the same and what is different about your answers?

You can check your answers on the NEXT SLIDE

Answers

1.

Write fractions to complete the sentences.

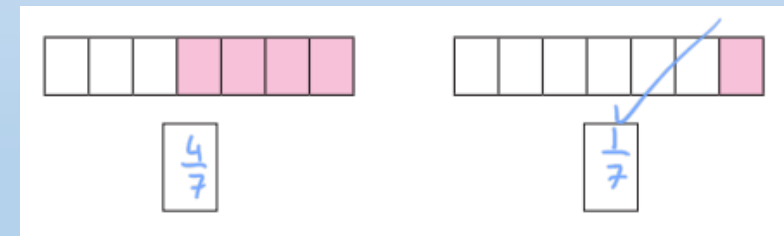
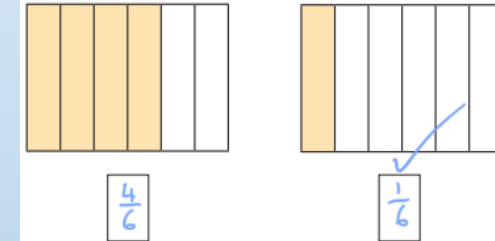
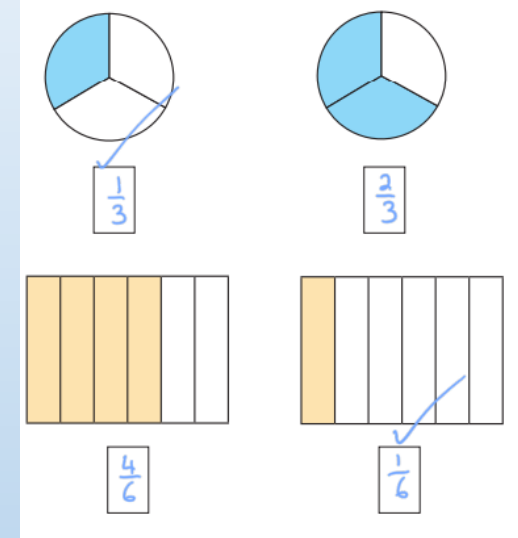
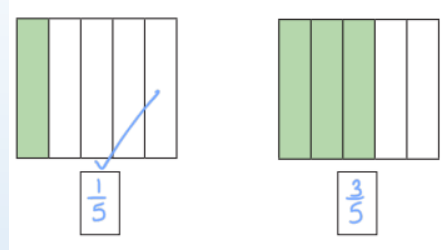
a) $\frac{3}{6}$ of the tower is green.

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

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



2.



Answers

3.

Write the fractions in the table.

$\frac{1}{6}$	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{1}{10}$	$\frac{1}{8}$
$\frac{3}{5}$	$\frac{1}{4}$	$\frac{1}{99}$	$\frac{6}{1}$	$\frac{1}{250}$

Unit fractions	Non-unit fractions
$\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{99}$ $\frac{1}{10}$ $\frac{1}{8}$ $\frac{1}{250}$	$\frac{6}{1}$ $\frac{3}{4}$ $\frac{2}{3}$ $\frac{3}{5}$

Write two more examples of your own in each column.

4.

a) What is a unit fraction? What is a non-unit fraction?

Talk about it with a partner.

b) Complete the sentences.

An example of a unit fraction is $\frac{1}{5}$

The numerator is always 1

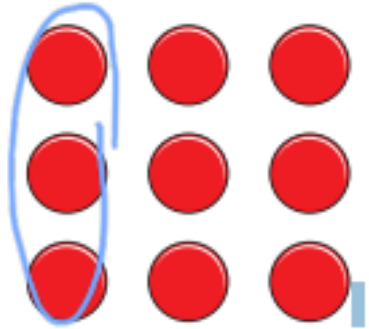
An example of a non-unit fraction is $\frac{3}{5}$

The numerator is always greater than 1

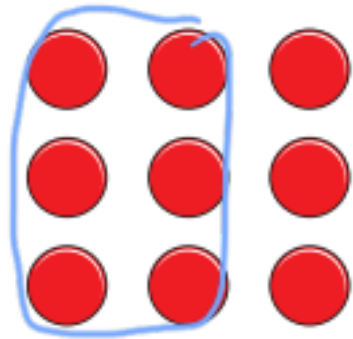
Answers – Optional Challenge

5

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



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



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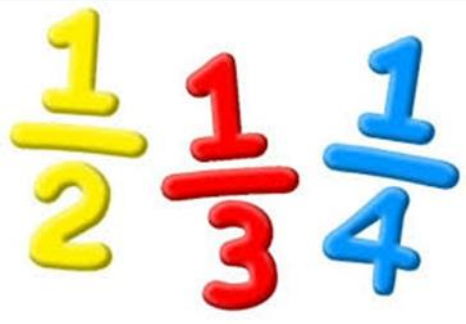
Write today's date and LO in your work book.

28.4.20

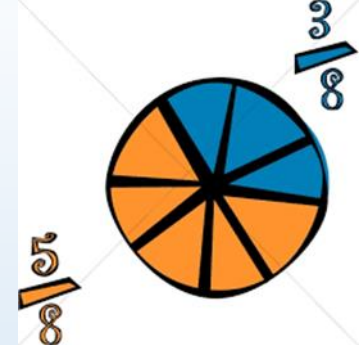
LO: To recognise and make a whole

Starter:

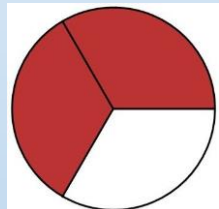
Write out your **10x table**. Remember when x10, you put a zero on the end of the number to change the place value.
 $0 \times 10 = 0$, $1 \times 10 = 10$, $2 \times 10 = 20$, $3 \times 10 = 30$, $4 \times 10 = 40$... continue up to 12×10 .



Fractions



Revise:

- Fractions are **parts of a whole**.
- You can have fractions of number e.g. $\frac{1}{2}$ of 8 = 4
- You can have fractions of shape e.g. $\frac{2}{3}$ of a circle = 

- The **top** number is known as a **numerator**.
- The **bottom** number is known as a **denominator**.

$$\frac{?}{2} = \text{half / halves}$$

$$\frac{?}{3} = \text{third / thirds}$$

$$\frac{?}{4} = \text{quarter / quarters}$$

$$\frac{?}{5} = \text{fifth / fifths}$$


$$\frac{?}{6} = \text{sixth / sixths}$$


$$\frac{?}{7} = \text{seventh / sevenths}$$

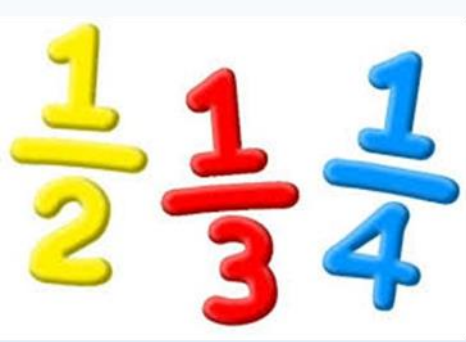
$$\frac{?}{8} = \text{eighth / eighths}$$

$$\frac{?}{9} = \text{ninth / ninths}$$

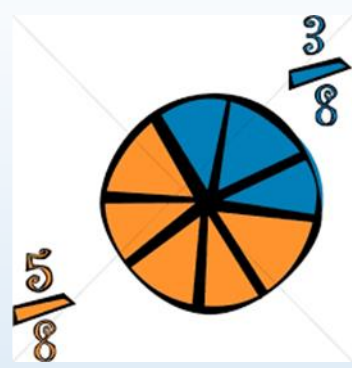
$$\frac{?}{10} = \text{tenth / tenths}$$

e.g. $\frac{1}{3} = \text{one third} =$ 

$\frac{2}{3} = \text{two thirds} =$ 



Fractions



Today we are going to recognise which fractions = 1 whole and practise making the whole.

Choose a phrase to complete the sentences.

greater than

less than

equal to

When the numerator is _____ the denominator, the fraction is less than one whole.

When the numerator is _____ the denominator, the fraction is equal to one whole.

Look at the statements to the left.

Have a think and have a go at completing them using the phrases provided.

These statements will help with your learning today.

Don't worry if you are not sure, remember it is important to have a go. Correct answers on next slide.

Choose a phrase to complete the sentences.

greater than

less than

equal to

When the numerator is less than the denominator, the fraction is less than one whole.

When the numerator is equal to the denominator, the fraction is equal to one whole.

e.g. $\frac{3}{4}$

The numerator – 3, is less than the denominator – 4.
Therefore the fraction is less than the whole.

e.g. $\frac{4}{4}$

The numerator – 4, is equal to the denominator – 4.
Therefore the fraction is equal to the whole.

Remember
=/equal
means the same

Challenge 1

Write these fraction in your book, practise reading them, then...

Circle the fractions that are equivalent to one whole

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

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

$$\frac{6}{10}$$

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

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

$$\frac{8}{9}$$

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

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

Key Vocabulary: Equivalent

is another word for equal,
it also means the same.

Top Tip: Always practise
reading your fractions as
well as writing them so you
become confident.

You can check your answers at the end

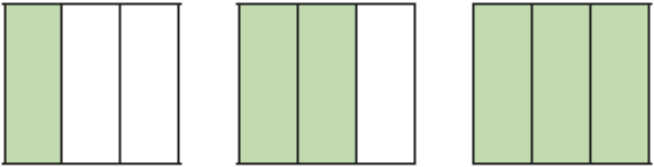
Challenge 2

What fraction of each shape is shaded?

Which fraction represents a whole?


Fill in the missing fractions.

a)



= one whole

b)



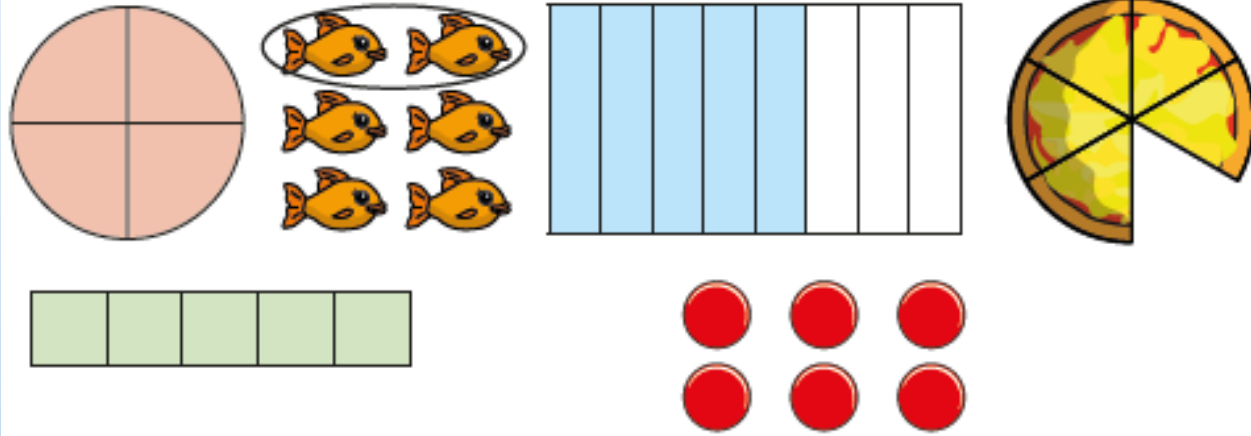
= one whole

You can check your answers at the end

Challenge 3

Record your answers as fractions in your book.

Here are some pictures.



You may find it easier to write down the fractions these pictures represent first.

Use the pictures to help you answer the questions.

a) Write three fractions that are less than one whole.

b) Write three fractions that are equal to one whole.

What do you notice? Talk about it with a partner.

You can check your answers at the end

Challenge 4

Here are some counters.



a) What fraction of the counters are yellow?

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

b) What fraction of the counters are red?

$$\frac{2}{5}$$

c) Complete the number sentence.

$$\frac{3}{5} + \frac{2}{5} = \frac{5}{5}$$

Here is a tower of cubes.



a) What fraction of the tower is green?

b) What fraction of the tower is blue?

c) Complete the number sentence.

$$\square + \square = \square$$

You can check your answers on the NEXT SLIDE

Optional – Extra Challenge

Complete the number sentences.

a) $\frac{3}{5} + \boxed{} = 1$

c) $\boxed{} = \frac{2}{7} + \frac{5}{7}$

b) $\boxed{} + \frac{4}{10} = 1$

d) $\frac{9}{9} = \boxed{} + \frac{5}{9}$

You can check your answers on the NEXT SLIDE

Answers

1. Circle or tick

$\frac{3}{5}$ $\frac{4}{4}$ $\frac{6}{10}$ $\frac{2}{2}$
 $\frac{10}{10}$ $\frac{8}{9}$ $\frac{3}{3}$ $\frac{5}{5}$

2.

What fraction of each shape is shaded?

Which fraction represents a whole?

Fill in the missing fractions.

a)

$\frac{1}{3}$ $\frac{2}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ = one whole

b)

$\frac{1}{2}$ $\frac{2}{2}$ $\frac{2}{2}$ = one whole

3.

Use the pictures to help you answer the questions.

a) Write three fractions that are less than one whole.

$\frac{2}{6}$ $\frac{5}{8}$ $\frac{5}{6}$

b) Write three fractions that are equal to one whole.

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

4.

Complete the sentences.



a) What fraction of the tower is green?

$\frac{3}{4}$

b) What fraction of the tower is blue?

$\frac{1}{4}$

c) Complete the number sentence.

$\frac{3}{4} + \frac{1}{4} = \frac{4}{4}$

Answers – Optional Challenge

Complete the number sentences.

$$\text{a) } \frac{3}{5} + \boxed{\frac{2}{5}} = 1$$

$$\text{c) } \boxed{1} = \frac{2}{7} + \frac{5}{7}$$

$$\text{b) } \boxed{\frac{6}{10}} + \frac{4}{10} = 1$$

$$\text{d) } \frac{9}{9} = \boxed{\frac{5}{9}} + \frac{5}{9}$$

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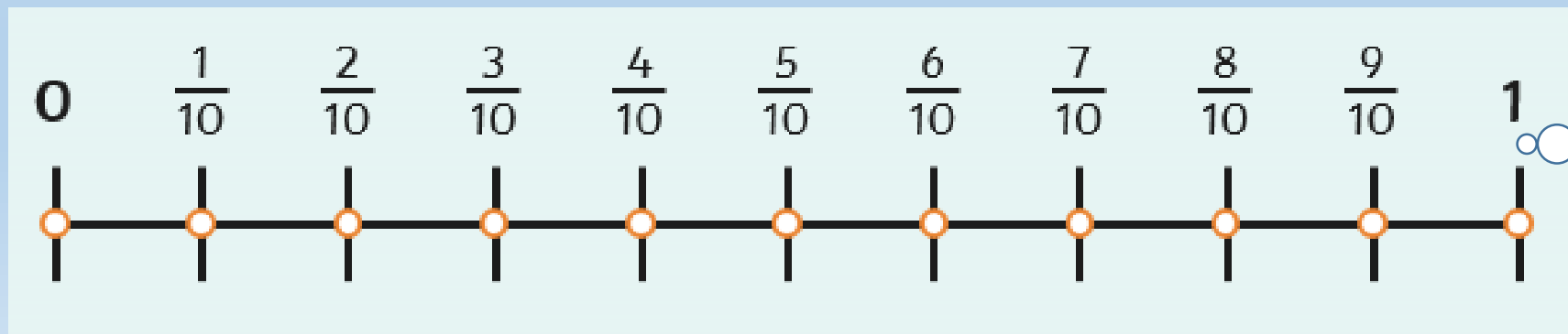
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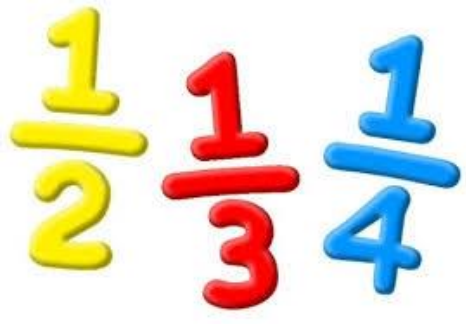
LO: To understand tenths and solve related problems

Starter:

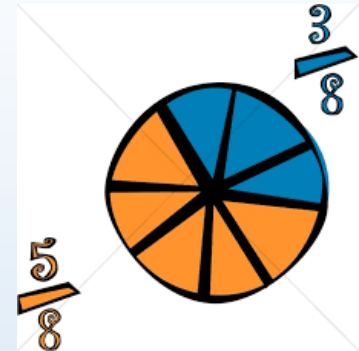
Count in tenths – use the number line to help you:



Notice that the final number is 1. This represents 1 whole number.



Fractions



Today we will be focusing on tenths...

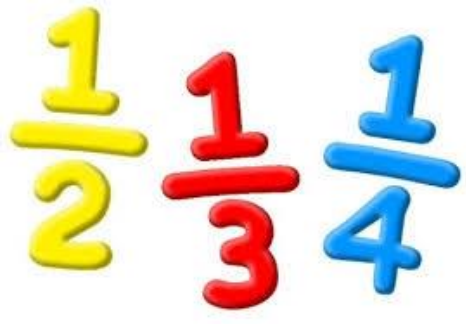
A **tenth** can be written in **words** – tenth

A **tenth** can be written as a **fraction** – $1/10$

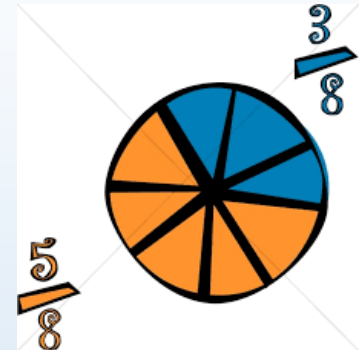
A **tenth** can be written as a **decimal** – 0.1 (we will look at this on Friday)

A **tenth** is 1 part out of 10 e.g. $2/10$ of 10 is 2

Note: The word tenth can also mean the 10th position e.g. the 10th day in a month but that is not what we are thinking about today. We are going to focus on fractions.



Fractions



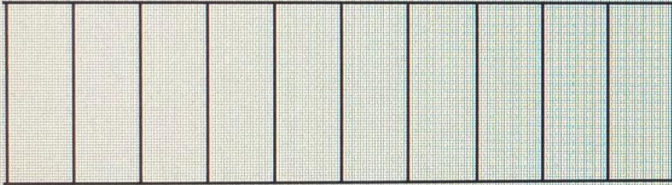
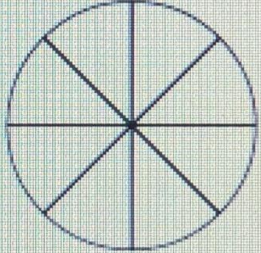
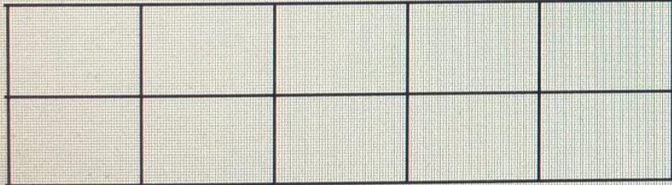
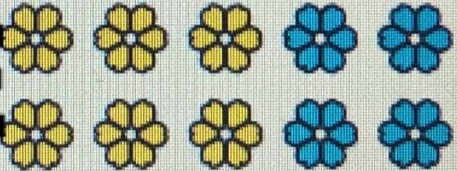
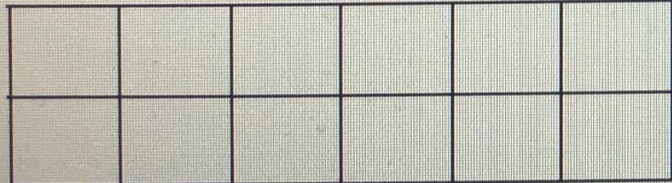

Click on the picture to watch the video tutorial.

<https://www.youtube.com/watch?v=YwxVv2ZE1Y4>

The screenshot shows a video player interface. At the top, there is an orange banner with the word "Tenths" in white. Below the banner, the text "There are 10 flowers in a bunch." is displayed. Underneath the text, there are two rows of five flowers each. The first row contains two blue flowers followed by three orange flowers. The second row contains five orange flowers. The video player controls at the bottom show a progress bar at 0:01 / 8:19, along with play, volume, and other standard controls. A "White Rose Maths" logo is visible in the top right corner of the video frame.

Challenge 1

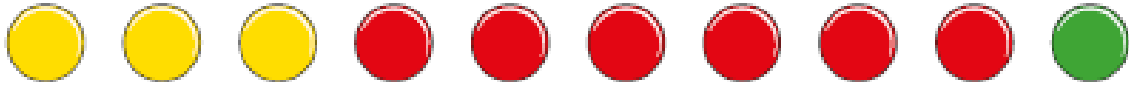
Look at the pictures below. Write down the letters of the pictures that show tenths in your work books.

A		D	
B		E	
C		F	

You can check your answers at the end

Challenge 2

Write fractions to complete the sentences.



- a) of the counters are yellow.
- b) of the counters are red.
- c) of the counters are green.

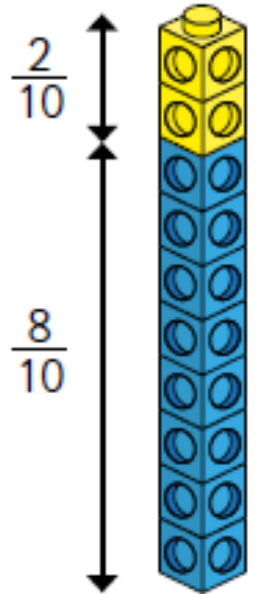
You can check your answers at the end

Challenge 3

Amir has some blue and yellow cubes.

He makes a tower using 10 cubes.

Investigate how many different towers Amir can make with 10 cubes, if every tower has a different fraction of blue and yellow cubes.



Think about your number bonds to 10 – you can use these to help.

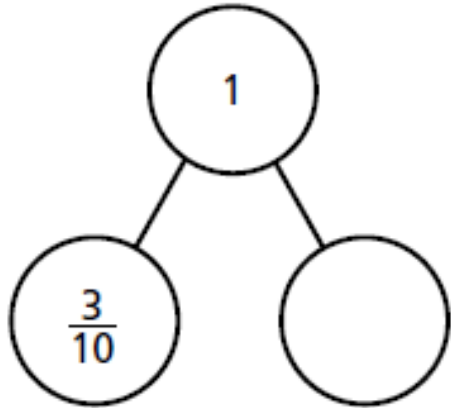
Can you find all possibilities?

You can check your answers at the end

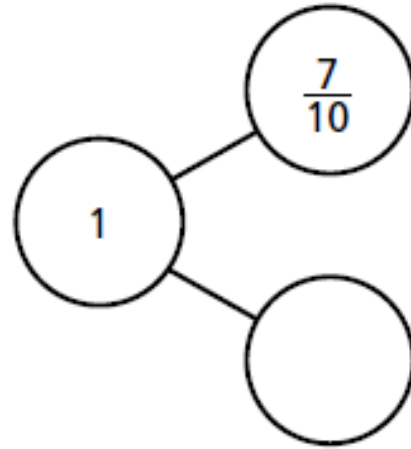
Challenge 4

Complete the part-whole models.

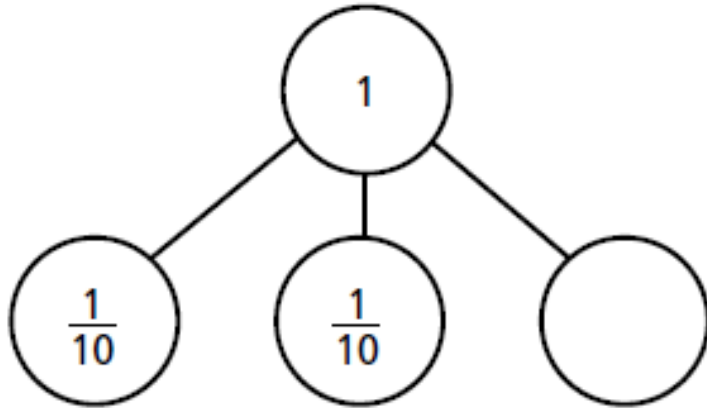
a)



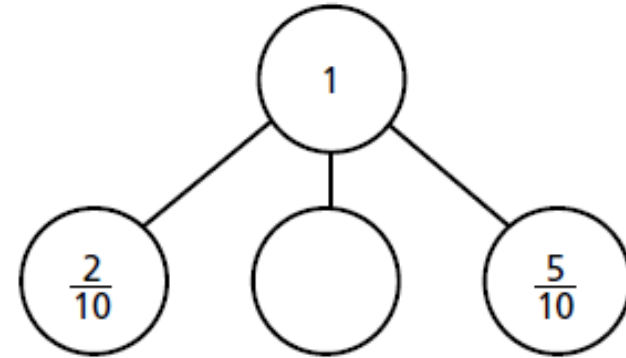
b)



c)



d)



You can check your answers at the end

Extra Challenge – Word Problems

Complete as many word problems as you can in the time, or you could come back to these as your starter tomorrow. Look at the next 2 slides (36 and 37).



Read

Read the question.
What is the important information?

Understand

Understand the question.
What do you need to find out?

Choose

Choose the correct method of calculation and operation(s).

Solve

Solve the problem.
Make sure you follow the steps.

Answer

Answer the question.
What were you meant to find out?

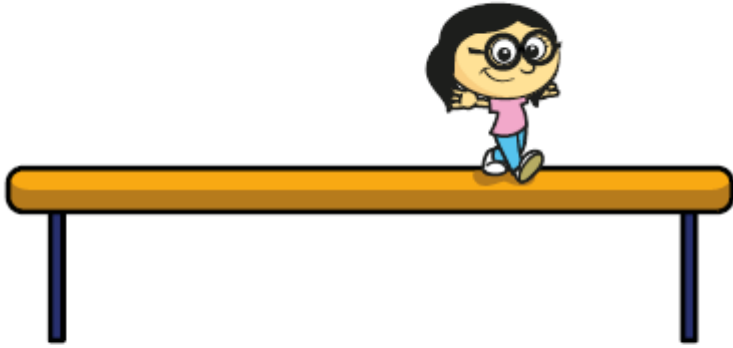
Check

Check your answer.
Use the inverse to check your working out.

Remember RUCSAC when solving problems.

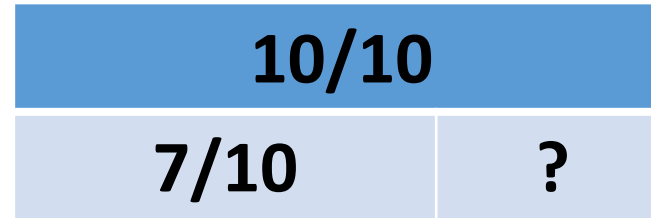
These steps will help you reach success!

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



How many tenths does she have left to travel?

Top Tips: You could use a bar model or your knowledge of addition and subtraction to help you:



$$7 + ? = 10$$

- 6 10 boys share 3 pizzas equally.



What fraction of a pizza do they each get?

Top Tips:

Step 1 - Begin by working out how many slices in 1 pizza. Then, how many slices are in 3 pizzas. Use your times tables. **3 'groups of' ? = ?**

Step 2 - Then, you could use pictorial sharing method (draw 10 circles) or your knowledge of multiplication and division.

$$30 \text{ 'shared between' } 10 = ?$$

7 Dani has a bag of sweets.

$\frac{1}{2}$ of the sweets are red.

$\frac{3}{10}$ of the sweets are yellow.

The rest are green.

What fraction of the sweets are green?



8 Mo also has a bag of sweets.

$\frac{4}{10}$ of his sweets are red.

The rest are green or yellow.

What fraction of Mo's sweets could be green?

What fraction could be yellow?

How many possible answers can you find?

Look carefully at the first fraction.

How else could we show half?

What is half of 10? 5

So $\frac{1}{2}$ can also be written as $\frac{5}{10}$.

This should help answer this question.

Answers

1. a) A, B, E, F

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.

Possible answers:

Yellow $\frac{0}{10}$ $\frac{1}{10}$ $\frac{2}{10}$ $\frac{3}{10}$ $\frac{4}{10}$ $\frac{5}{10}$ $\frac{6}{10}$ $\frac{7}{10}$ $\frac{8}{10}$ $\frac{9}{10}$ $\frac{10}{10}$

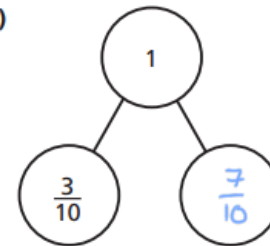
Blue $\frac{10}{10}$ $\frac{9}{10}$ $\frac{8}{10}$ $\frac{7}{10}$ $\frac{6}{10}$ $\frac{5}{10}$ $\frac{4}{10}$ $\frac{3}{10}$ $\frac{2}{10}$ $\frac{1}{10}$ $\frac{0}{10}$

Notice how these answers have been recorded systematically to find all possibilities. Can you see how number bonds have been used?

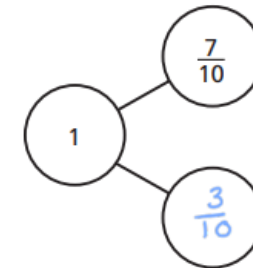
4.

Complete the part-whole models.

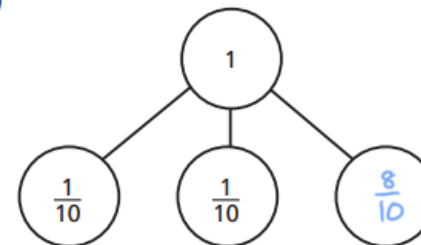
a)



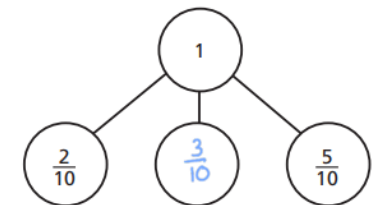
b)



c)



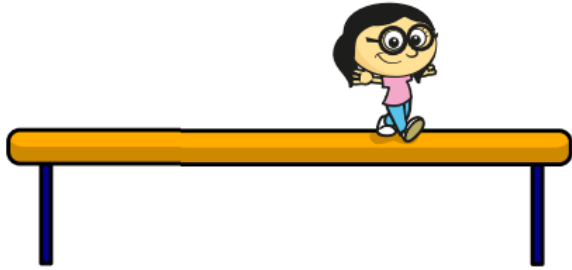
d)



Answers

5.

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



How many tenths does she have left to travel?

$\frac{3}{10}$

7.

Dani has a bag of sweets.

$\frac{1}{2}$ of the sweets are red.

$\frac{3}{10}$ of the sweets are yellow.

The rest are green.

What fraction of the sweets are green?



$\frac{2}{10}$

6.

10 boys share 3 pizzas equally.



What fraction of a pizza do they each get?



$\frac{3}{10}$

8.

Mo also has a bag of sweets.

$\frac{4}{10}$ of his sweets are red.

The rest are green or yellow.

What fraction of Mo's sweets could be green?

e.g. $\frac{1}{10}$

What fraction could be yellow?

$\frac{5}{10}$

How many possible answers can you find?

Possible answers:

Green $\frac{0}{10}$ $\frac{1}{10}$ $\frac{2}{10}$ $\frac{3}{10}$ $\frac{4}{10}$ $\frac{5}{10}$ $\frac{6}{10}$

Yellow $\frac{6}{10}$ $\frac{5}{10}$ $\frac{4}{10}$ $\frac{3}{10}$ $\frac{2}{10}$ $\frac{1}{10}$ $\frac{0}{10}$

Miss Cole's Maths Group

Write today's date and LO in your work book.

30.4.20

LO: To count in tenths







Starter:

- Practise reading your fractions from the posters given on Monday
- Practise counting in tenths

Counting Starter

There is no need to record anything in your book for this activity, but I recommend that you count out loud. Check your answers on the next slide.

Continue the sequence.

	$\frac{1}{10}$		<table border="1" data-bbox="1121 535 1235 671"><tr><td> </td></tr><tr><td> </td></tr></table>				
	$\frac{2}{10}$		<table border="1" data-bbox="1121 714 1235 849"><tr><td> </td></tr><tr><td> </td></tr></table>				
	<table border="1" data-bbox="509 892 624 1028"><tr><td> </td></tr><tr><td> </td></tr></table>				<table border="1" data-bbox="1121 892 1235 1028"><tr><td> </td></tr><tr><td> </td></tr></table>		

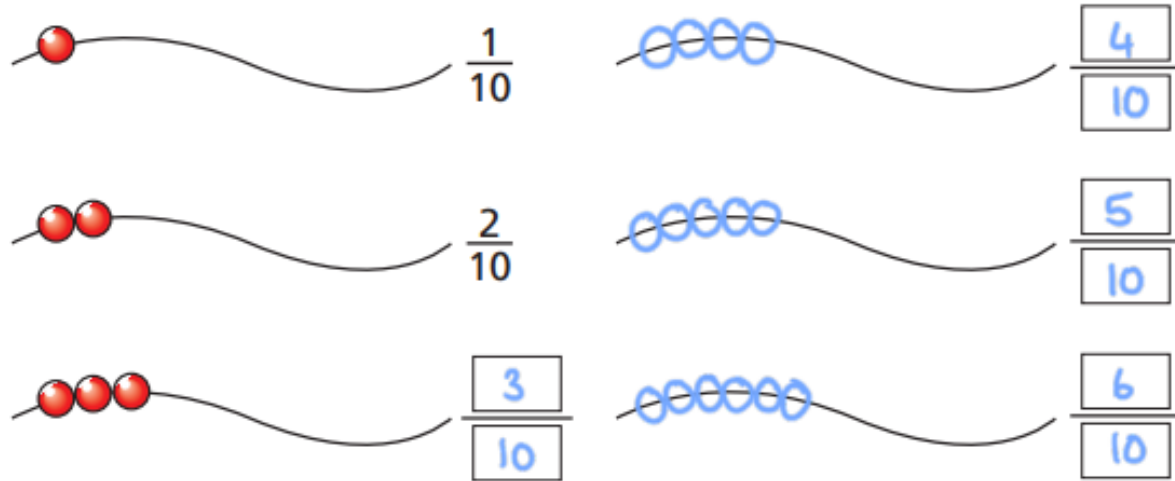
Continue the sequence.

<table border="1" data-bbox="1409 511 1783 664"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr></table>	●	●	●	●	●	●	●	●	●	●	$\frac{10}{10}$	<table border="1" data-bbox="1961 511 2331 664"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>											<table border="1" data-bbox="2344 535 2446 671"><tr><td> </td></tr><tr><td> </td></tr></table>				
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<table border="1" data-bbox="1409 721 1783 873"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td> </td></tr></table>	●	●	●	●	●	●	●	●	●		$\frac{9}{10}$	<table border="1" data-bbox="1961 721 2331 873"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>											<table border="1" data-bbox="2344 742 2446 878"><tr><td> </td></tr><tr><td> </td></tr></table>				
●	●	●	●	●																							
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<table border="1" data-bbox="1409 931 1783 1083"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td> </td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td> </td></tr></table>	●	●	●	●		●	●	●	●		<table border="1" data-bbox="1796 949 1898 1085"><tr><td> </td></tr><tr><td> </td></tr></table>			<table border="1" data-bbox="1961 931 2331 1083"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>											<table border="1" data-bbox="2344 949 2446 1085"><tr><td> </td></tr><tr><td> </td></tr></table>		
●	●	●	●																								
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<table border="1" data-bbox="1409 1140 1783 1293"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>											<table border="1" data-bbox="1796 1159 1898 1295"><tr><td> </td></tr><tr><td> </td></tr></table>			<table border="1" data-bbox="1961 1140 2331 1293"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>											<table border="1" data-bbox="2344 1159 2446 1295"><tr><td> </td></tr><tr><td> </td></tr></table>		

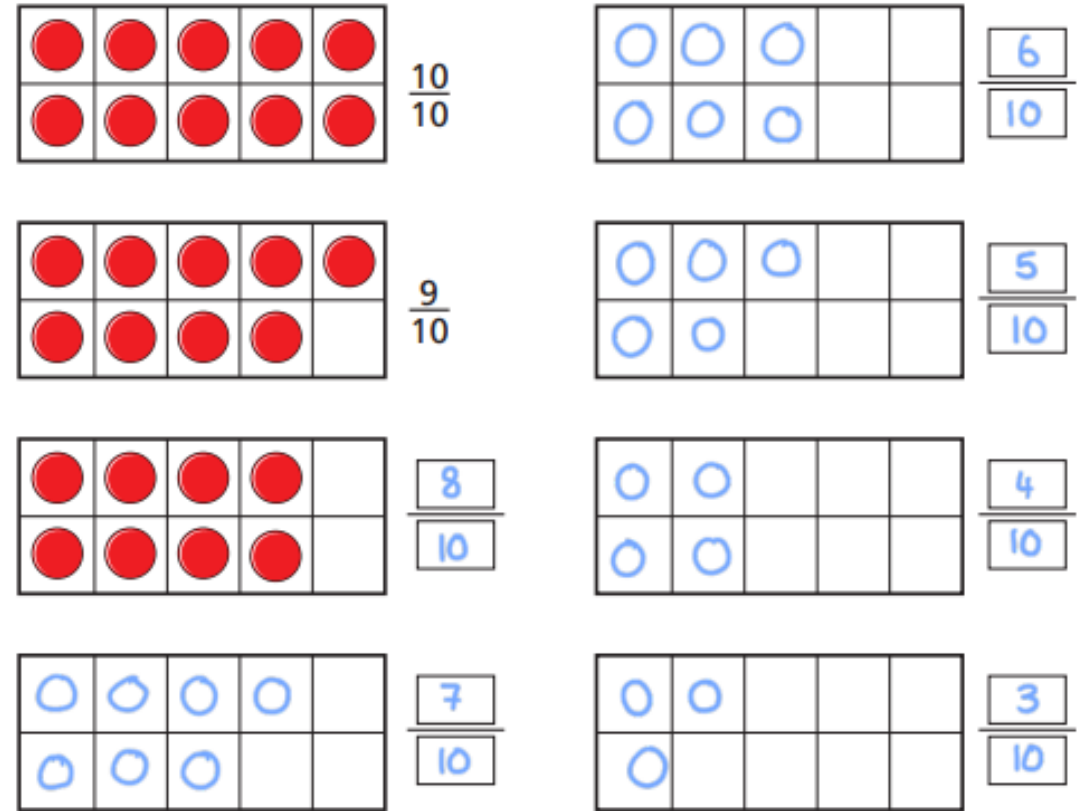
Counting Starter

Check you were counting correctly. Continue to practise counting forwards and backwards in tenths until you are confident.

Continue the sequence.



Continue the sequence.



Challenge 1

Write the missing fractions in each sequence.

a)

$\frac{1}{10}$	$\frac{2}{10}$		$\frac{4}{10}$	
----------------	----------------	--	----------------	--

$\frac{6}{10}$	$\frac{7}{10}$		$\frac{9}{10}$	$\frac{10}{10}$
----------------	----------------	--	----------------	-----------------

b)

$\frac{10}{10}$	$\frac{9}{10}$		$\frac{7}{10}$	
-----------------	----------------	--	----------------	--

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

Please underline or circle the fraction you have added when recording in your books.

You can check your answers at the end

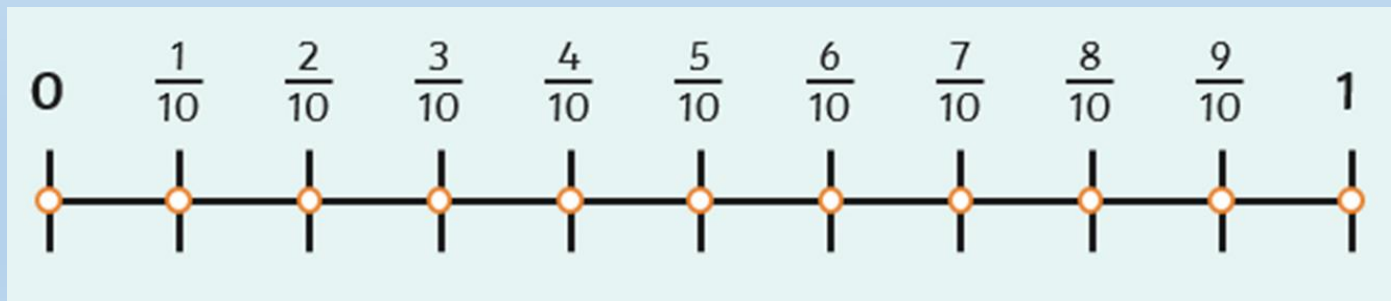
Challenge 2

What fraction is each arrow pointing to?



A = B = C =

You could use the tenths number line to help you if you are unsure.



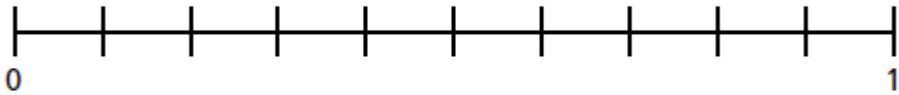
You can check your answers at the end

Challenge 3

Write the fractions in the correct places on the number lines.

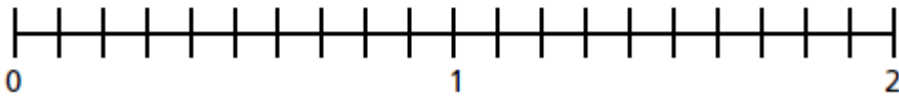
a)

$$\frac{5}{10} \quad \frac{9}{10} \quad \frac{3}{10} \quad \frac{10}{10}$$



b)

$$\frac{6}{10} \quad \frac{14}{10} \quad \frac{18}{10}$$

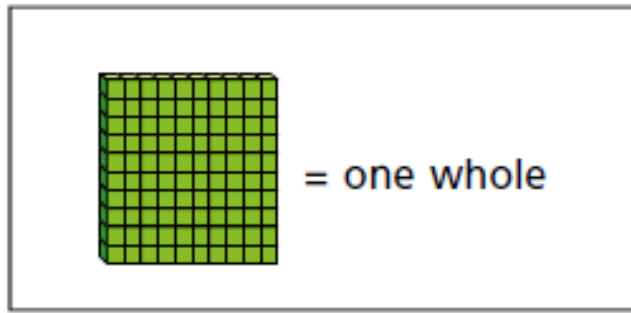


Look carefully at b).

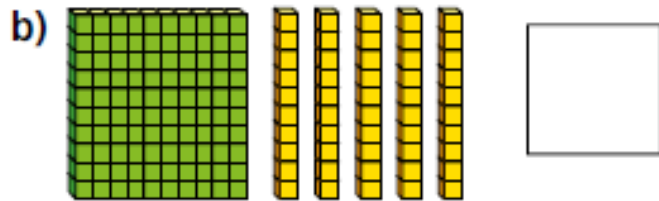
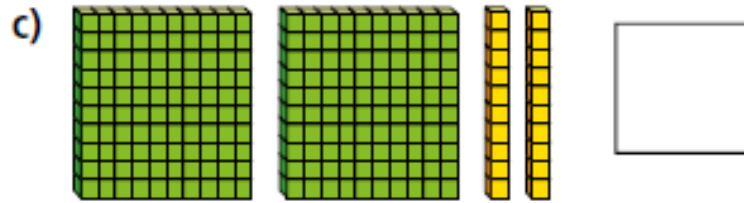
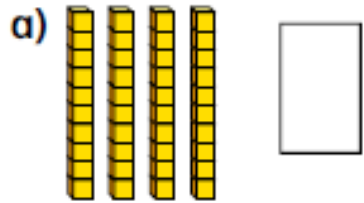
What has changed?
What do you notice?

You can check your answers at the end

Challenge 4



What number is represented in each picture?



This is base 10.
The green 100 square represents 10 lots of 10.
The yellow sticks show 1 lot of 10.
Your denominator is 10.

When the **numerator** is **larger than the denominator** it is known as an **improper fraction**.

You can check your answers at the end

Optional – Extra Challenge

Whitney is thinking of a fraction.



My fraction is more than one whole but less than 2
My fraction has an odd number as the numerator.

What could Whitney's fraction be?

List all the possible fractions.

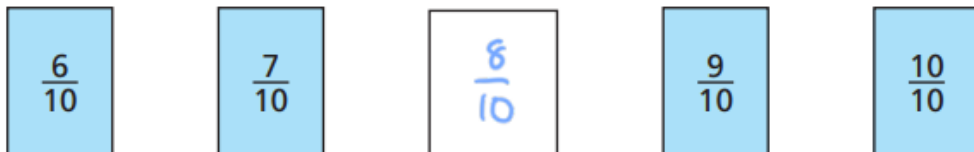
You can check your answers on the NEXT SLIDE

Answers

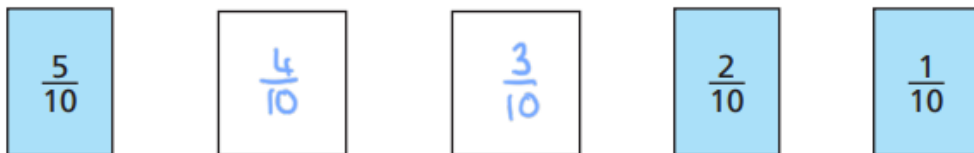
1.

Write the missing fractions in each sequence.

a)



b)



2.

What fraction is each arrow pointing to?

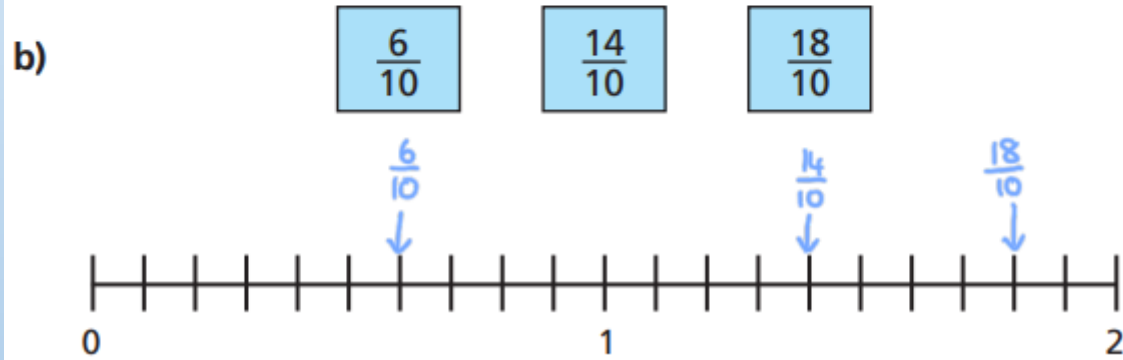
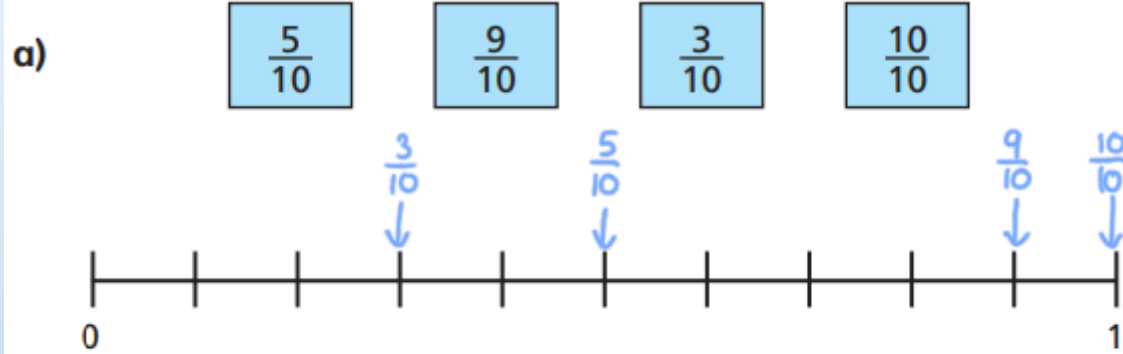


$$A = \frac{1}{10} \quad B = \frac{5}{10} \quad C = \frac{8}{10}$$

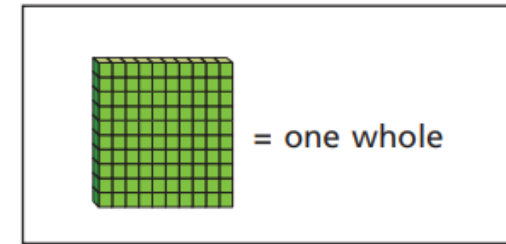
Answers

3.

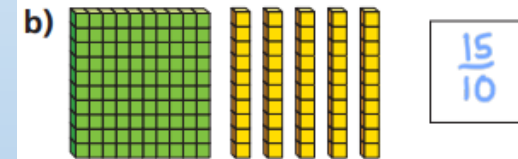
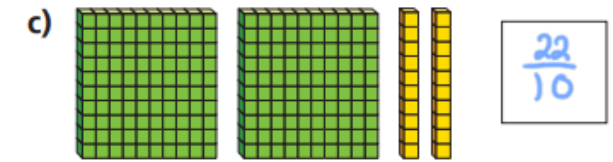
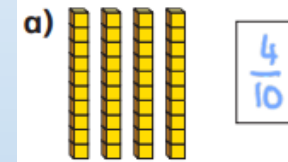
Write the fractions in the correct places on the number lines.



4.



What number is represented in each picture?



Miss Cole's Maths Group

Write today's date and LO in your work book.

1.5.20

LO: To relate tenths to decimals

Starter:

- Practise reading your fractions from the posters given on Monday
- Practise counting in tenths, forwards and backwards

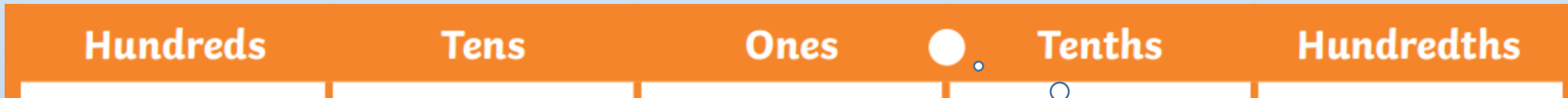
Fractions and Decimals

5.6 3.1 2.65
9.3 0.7 1.24
8.2 0.1 2.2
0.12 7.7 0.3

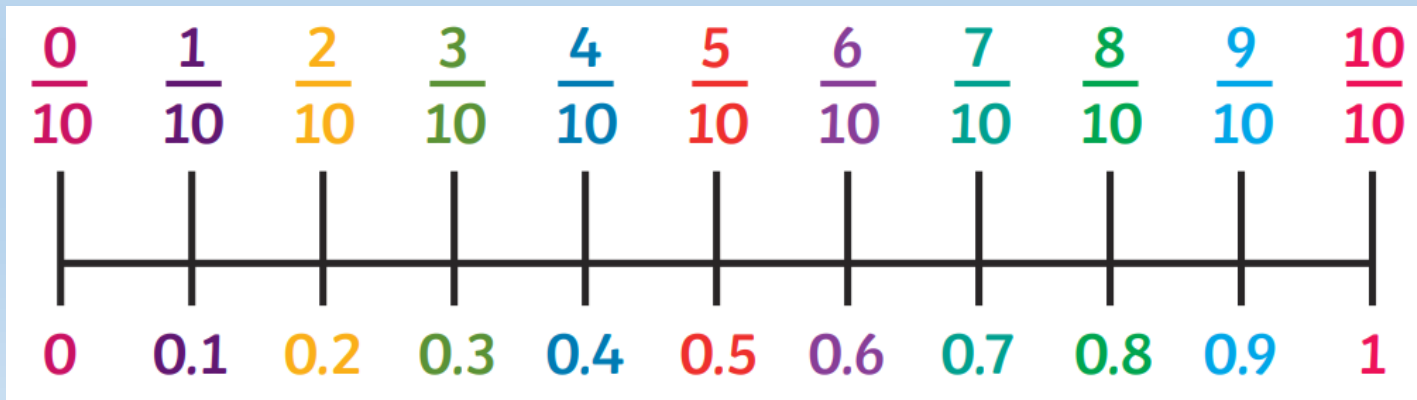
5.6 3.1 2.65
9.3 0.7 1.24
8.2 0.1 2.2
0.12 7.7 0.3

Key Points:

- A decimal is a type of fraction
- Look at this place value table. Any digit to the right of the **decimal point** is **LESS THAN** 1. e.g. 0.1, 0.2, 0.3, 0.4
A tenth is less than 1 and a hundredth is even smaller than a tenth.



- Look at these fractions and decimals on a number line.



This is the decimal point.

Fractions and Decimals

5.6 3.1 2.65
9.3 0.7 1.24
8.2 0.1 2.2
0.12 7.7 0.3

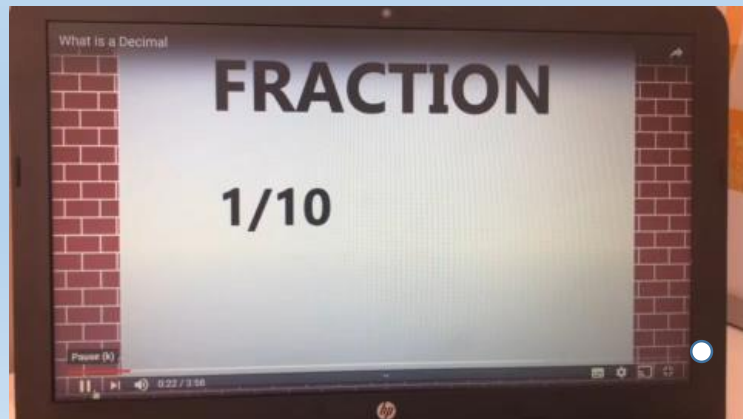
5.6 3.1 2.65
9.3 0.7 1.24
8.2 0.1 2.2
0.12 7.7 0.3

Click on the dinosaur to watch this video about decimals and place value. You only need to watch up to 2:10.

<https://www.youtube.com/watch?v=t9vqm2eM5mk>



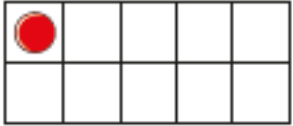
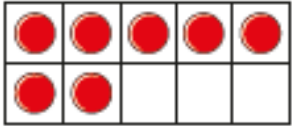
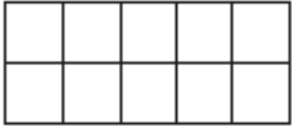
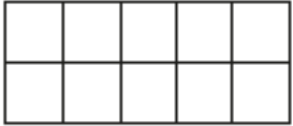
Click on this video to see tenths **converted** from fractions to decimals.



converted = changed

Challenge 1

Complete the table.

Representation	Words	Fraction	Decimal
	1 tenth		0.1
		$\frac{7}{10}$	
			0.3
	5 tenths		

You can check your answers at the end

Challenge 2

Match each bar model to the equivalent decimal.



0.8



0.6



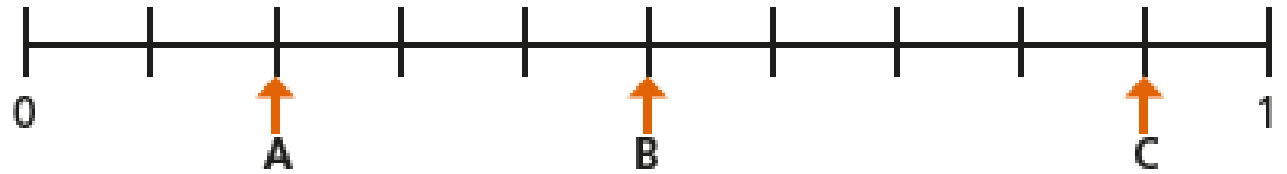
0.4

You can check your answers at the end

Challenge 3

You could use the number line on slide 51 to help you.

What decimal is each arrow pointing to?



A = B = C =

You can check your answers at the end

Challenge 4

Continue the pattern.

$\frac{1}{10}$	0.2	3 tenths	$\frac{4}{10}$	0.5
6 tenths				

Take note of the pattern. So far we have tenths written as a:
fraction, decimal, words,
fraction, decimal, words...

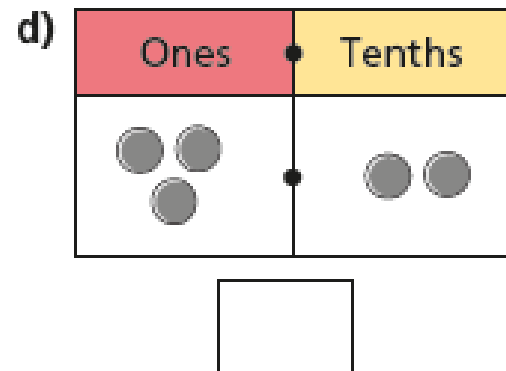
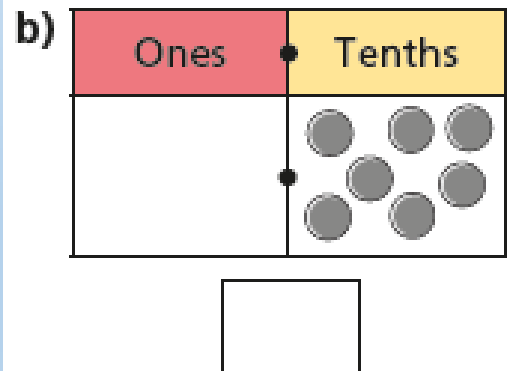
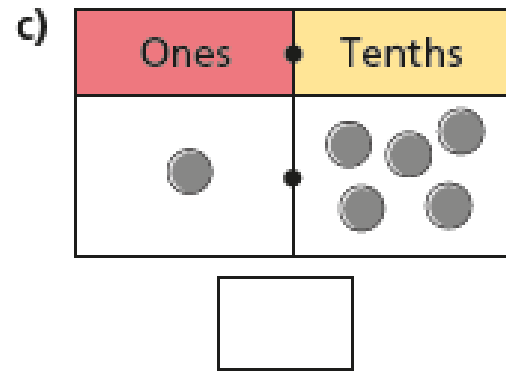
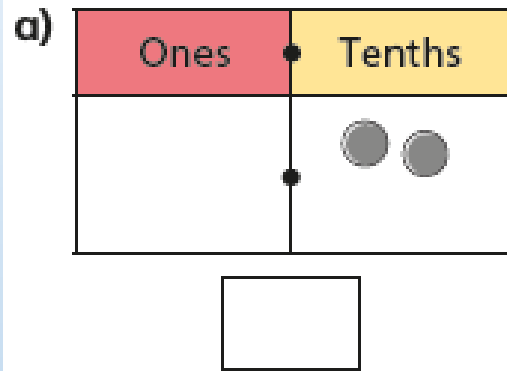
What comes next?

You can check your answers at the end

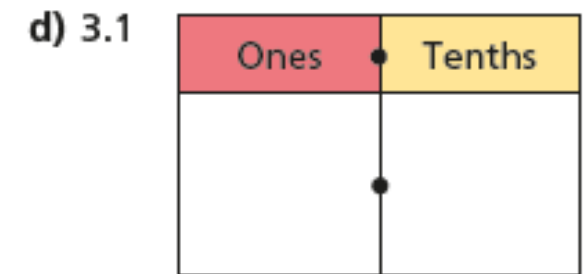
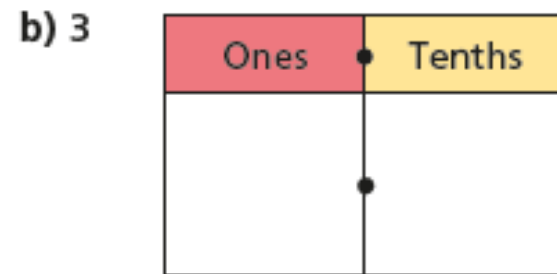
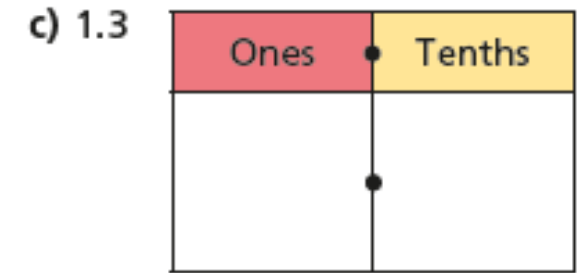
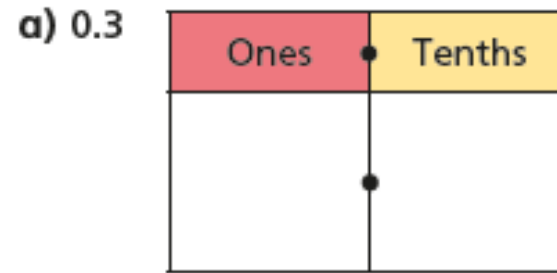
Optional Practise:

Mo is using a place value chart to represent numbers.

Write each number as a decimal.



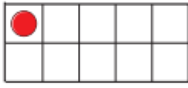
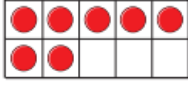
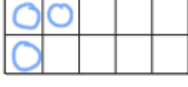
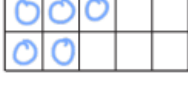
Draw counters to represent the numbers.



You can check your answers on the NEXT SLIDE

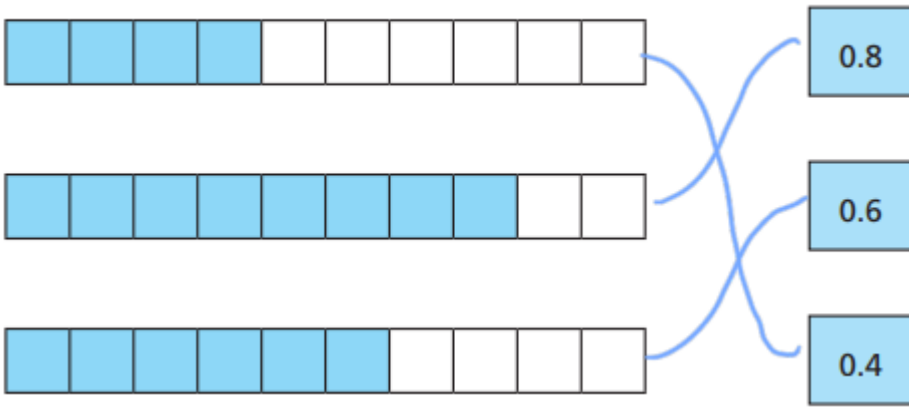
Answers

1.

Representation	Words	Fraction	Decimal
	1 tenth	$\frac{1}{10}$	0.1
	7 tenths	$\frac{7}{10}$	0.7
	3 tenths	$\frac{3}{10}$	0.3
	5 tenths	$\frac{5}{10}$	0.5

2.

Match each bar model to the equivalent decimal.



0.8

0.6

0.4

3.

What decimal is each arrow pointing to?



A = 0.2 B = 0.5 C = 0.9

4.

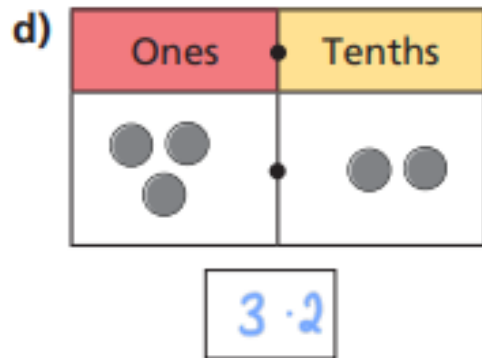
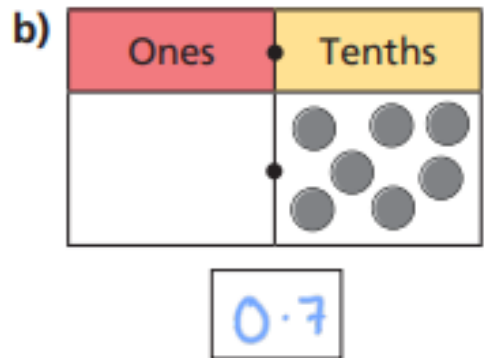
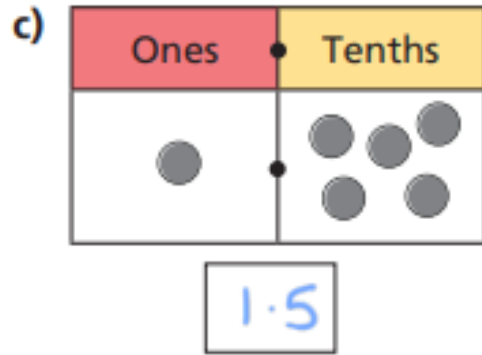
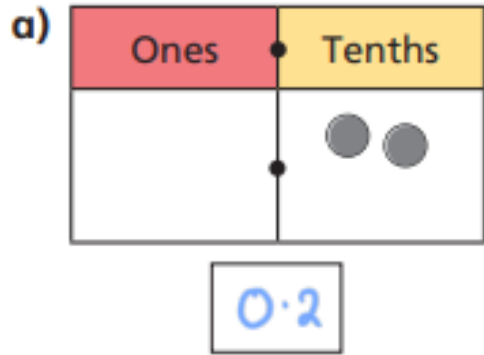
Continue the pattern.

$\frac{1}{10}$	0.2	3 tenths	$\frac{4}{10}$	0.5
6 tenths	$\frac{7}{10}$	0.8	9 tenths	$\frac{10}{10}$

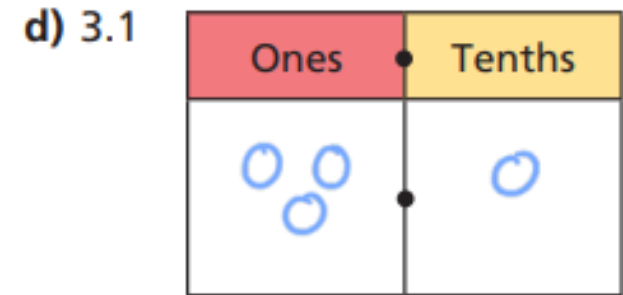
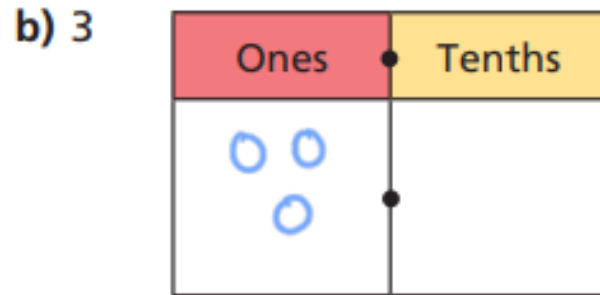
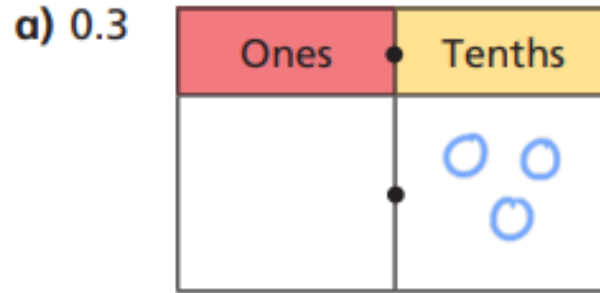
Answers – Optional Practise

Mo is using a place value chart to represent numbers.

Write each number as a decimal.



Draw counters to represent the numbers.



Well done for your amazing maths work and perseverance this week!

