



$$\begin{array}{r} 345 \\ + 95 \\ \hline 440 \\ + 41067 \\ \hline 4567 \\ + 104 \\ \hline \end{array}$$



# Tenths as Decimals

# Aim

- Recognise and write decimal equivalents of any number of tenths or hundredths.



# Tenths as Decimals

# Diving



Complete this table:

Representation	Decimal	Fraction
	1.1	$\frac{11}{10}$
	1.2	$\frac{12}{10}$
	1.8	$\frac{18}{10}$
	1.6	$\frac{16}{10}$

# Tenths as Decimals

# Diving



Write each of the following as a decimal and a fraction:



0.5

$$\frac{5}{10}$$



0.8

$$\frac{8}{10}$$

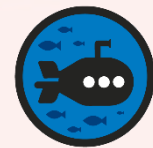


0.3

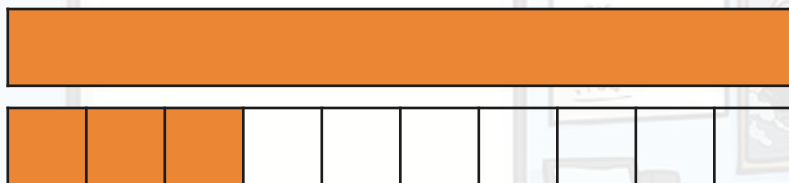
$$\frac{3}{10}$$

## Tenths as Decimals

## Deeper



Petra and Leo write this representation in the ways shown:



$$\frac{4}{10}$$

1.3

Petra



Leo



Are both children correct? If not, can you explain what mistake they have made and what they should have written.

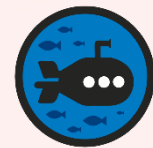
Leo is correct as the representation shows one whole and three-tenths (which is equal to 1.3).

Petra is incorrect. She has counted the one whole as  $\frac{1}{10}$  but it should have been  $\frac{10}{10}$ .

So it would be  $\frac{10}{10}$  and  $\frac{3}{10}$  which is  $\frac{13}{10}$ .

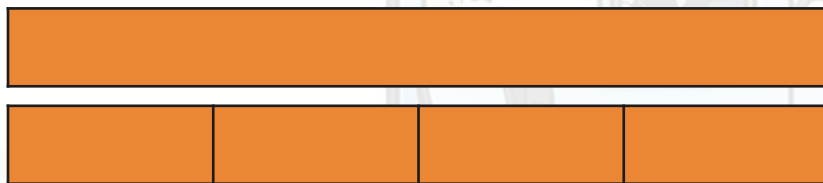
## Tenths as Decimals

## Deeper



Mandeep is converting decimals into fraction representations. This is her first conversion.

1.4 =



What mistake did she make?

The 1 whole is correct but 0.4 has been represented incorrectly. Mandeep has represented 0.4 as a whole divided into 4 equal parts. Instead, as 0.4 is equal to  $\frac{4}{10}$ , a whole should be divided into 10 equal parts with 4 parts shaded.

What should it look like?



## Tenths as Decimals

## Deepest



In a centimetre (cm), there are 10 millimetres (mm).

$$1\text{mm} = \frac{1}{10} \text{ cm}$$

Use this information to complete this table:

Centimetres and Millimetres	Millimetres	Fraction	Decimal
1cm 8mm	18mm	$1\frac{8}{10} \text{ cm } (\frac{18}{10})$	1.8cm
<b>1cm 3mm</b>	13mm	<b><math>1\frac{3}{10} \text{ cm } (\frac{13}{10})</math></b>	<b>1.3cm</b>
<b>0cm 6mm</b>	<b>6mm</b>	$\frac{6}{10} \text{ cm}$	<b>1.6cm</b>
<b>1cm 1mm</b>	<b>11mm</b>	<b><math>1\frac{1}{10} \text{ cm } (\frac{11}{10})</math></b>	1.1cm

# Tenths as Decimals

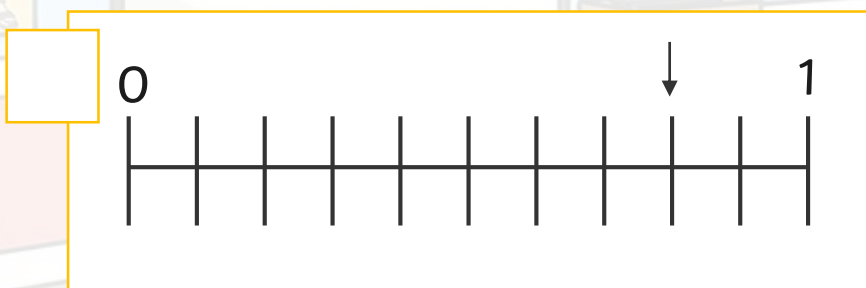
# Deepest



Which representations are equal to this representation?

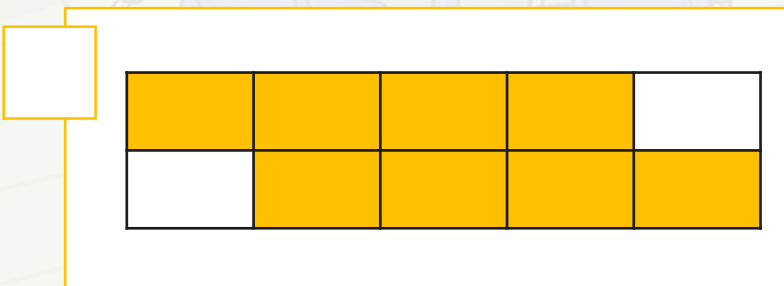


Tick the correct representations:



0.9

ten-ninths



$\frac{9}{10}$

