Main Maths Year 6 Week 1

<u>Day 3</u> Learning Question: How do I show decimals as fractions?

HOOK

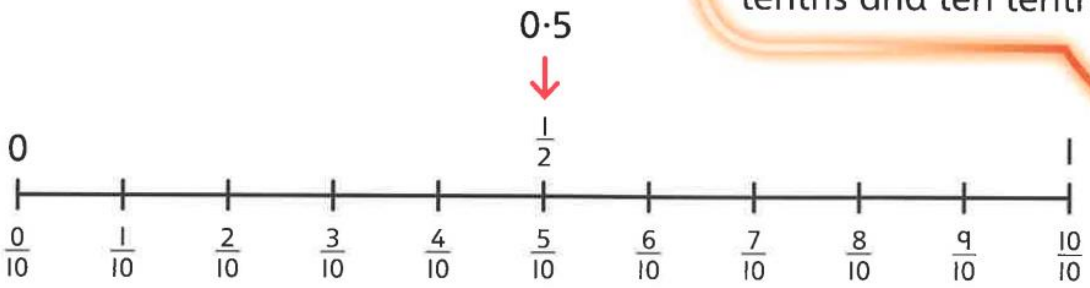
1 **a)** Where is Sofia on the route planner? Find the location on the route planner, and describe it as a fraction of a kilometre.

b) After 15 minutes Sofia has run 1·5 km. Locate her position on the route planner, and describe it as a fraction.

HOOK – Answers

0·5 is equivalent to a half, because five tenths is half-way between zero tenths and ten tenths.

a) 0·5 is equivalent to one half.



I think you could also write her distance as $\frac{5}{10}$ km, because $\frac{5}{10}$ is equivalent to $\frac{1}{2}$.

O	•	Tth
0	•	5

Sofia has run 0·5 km, which can also be written as $\frac{1}{2}$ km.

b)

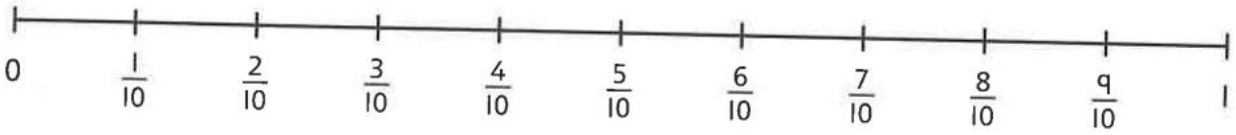
1·5 is equivalent to $1\frac{1}{2}$ and $1\frac{5}{10}$.

THINK TOGETHER 1

Jamie ran 0·7 km. Write this as a fraction.

O	•	Tth
	•	

I will use counters on a place value grid to help me.



I will use a number line to work it out.

0·7 km as a fraction is $\frac{\square}{\square}$ km.

THINK TOGETHER 2

These are the results for some other runners. Complete the table.

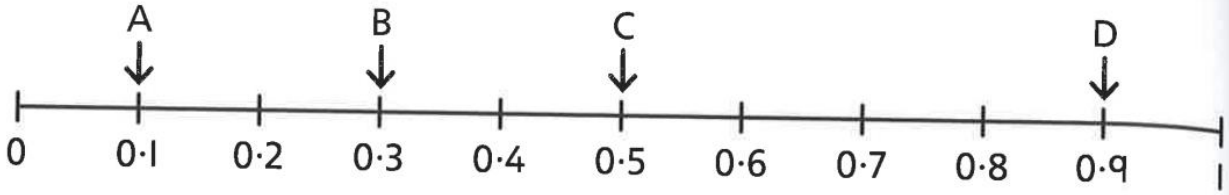
Runner	Distance as a decimal	Distance as a fraction
Aki	0·6 km	$\square$ km
Richard	$\square$ km	$\frac{3}{10}$ km
Jamilla	$\square$ km	$2\frac{3}{10}$ km
Kate	$\square$ km	$3\frac{1}{2}$ km

MAIN WORK Day 3

Learning Question: How do I show decimals as fractions?

1)

a) Write each number as a fraction.



A = $\frac{\square}{\square}$

B = $\frac{\square}{\square}$

C = $\frac{\square}{\square}$ or $\frac{\square}{\square}$

D = $\frac{\square}{\square}$

b) Explain why C can be written as two different fractions.

_____

_____

2)

Draw place value counters to represent each number.

$\frac{4}{10}$

O	•	Tth
	•	

$1\frac{4}{10}$

O	•	Tth
	•	

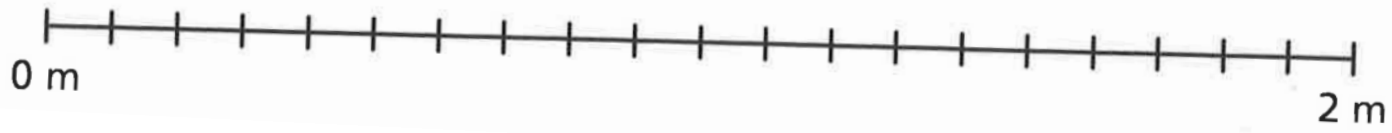
$2\frac{3}{4}$

O	•	Tth	Hth
	•		

$1\frac{1}{4}$

3) Here are the results from a long jump competition. Mark each distance jumped on the number line.

Child	Distance jumped
Jamie	1·25 m
Aki	0·75 m
Ambika	$1\frac{3}{4}$ m
Richard	$1\frac{1}{2}$ m



4) MAKING HEADWAY

Convert the fractions to decimals and the decimals to fractions.

a) $\frac{1}{4} = \square \cdot \square$

b) $\frac{2}{4} = \square \cdot \square$

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

d) $\frac{4}{4} = \square \cdot \square$

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

f) $\frac{8}{4} = \square \cdot \square$

g) $0{\cdot}3 = \frac{\square}{10}$

h) $\frac{3}{2} = \square \cdot \square$

i) $3{\cdot}2 = \square \frac{\square}{\square}$

j) $3{\cdot}4 = \square \frac{\square}{\square}$

k) $\square = \frac{3}{3}$

l) $\frac{\square}{3} = 2$

5) AIMING HIGH

Do you agree with Astrid?

Use diagrams and reasons to explain your answer as fully as you can.