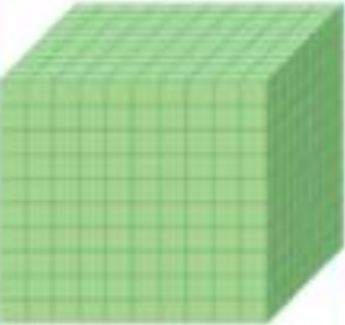



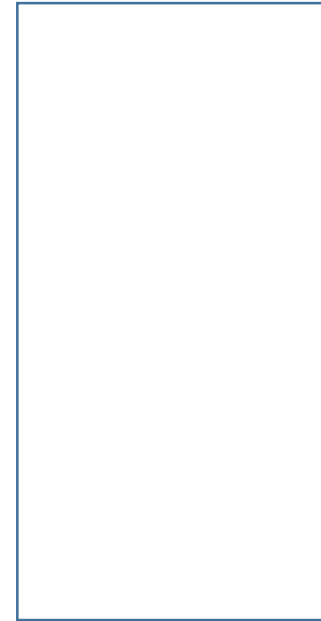


Year 4 Maths, 23/2/21

RECALL

Yesterday we investigated tenths and hundredths using a hundred square. Today we are going to learn to write tenths as decimal numbers. To begin with, let's have a look at a place value table.

Thousands	Hundreds	Tens	Units/Ones
 1000	 100	 10	 1



Each time we move to the right, the value of the column is ten times less.

What if there were another column here?
What is ten times smaller than one?

LO: I can write tenths as decimals

- SOME WILL EVEN use knowledge of tenths to explain an answer
- SOME will recognise equivalence between fractions, decimals, words and images
- MOST will write tenths as decimal numbers
- ALL will understand that a tenth is ten times smaller than one

GUIDED PRACTICE

The place value table doesn't finish after the ones column. There are more columns on the right!

This is a decimal point. It separates whole numbers and bits of numbers.

Each tenth is ten times smaller than one whole..

Thousands	Hundreds	Tens	Ones	Tenths
			0	. 1



To write one tenth as a decimal number, we put a 1 in the tenths column. We also need to show the decimal point, and to put a zero in the ones column to show that it is empty.

GUIDED PRACTICE continued

So now we have two ways of writing tenths:

As fractions

As decimals

$$\frac{1}{10}$$



0.1

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



0.3

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



0.5

INTELLIGENT PRACTICE

One chilli

Write these fractions as decimals:

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

$$\frac{7}{10}$$

$$\frac{9}{10}$$

Now write these decimals as fractions.

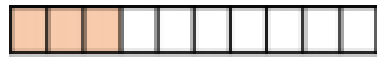
0.1

0.2

0.8

Two chillies

What fractions and decimals are represented in these diagrams?



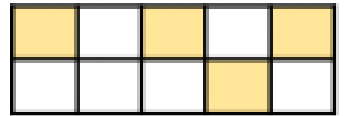
Fraction:

Decimal:



Fraction:

Decimal:



Fraction:

Decimal:

INTELLIGENT PRACTICE **answers**

One chilli

Write these fractions as decimals:

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

0.4

$$\frac{7}{10}$$

0.7

$$\frac{9}{10}$$

0.9

Now write these decimals as fractions.

0.1

$$\frac{1}{10}$$

0.2

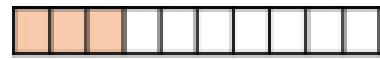
$$\frac{2}{10}$$

0.8

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

Two chillies

What fractions and decimals are represented in these diagrams?



Fraction: $\frac{3}{10}$

Decimal:

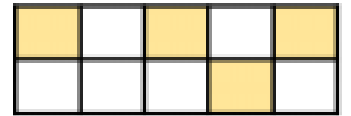
0.3



Fraction: $\frac{7}{10}$

Decimal:

0.7



Fraction: $\frac{4}{10}$


Decimal:

0.4

Three chillies


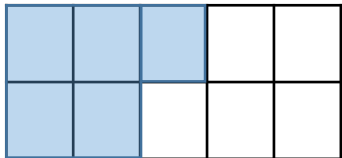
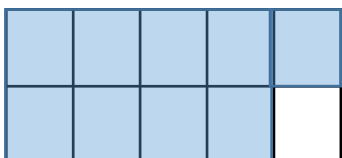
Each of these counters represents one tenth.

Complete the table.

Image	Words	Fraction	Decimal
			
	five tenths		
			0.9

Three chillies answers

Complete the table.

Image	Words	Fraction	Decimal
	Six tenths	$\frac{6}{10}$	0.6
	five tenths	$\frac{5}{10}$	0.5
	Nine tenths	$\frac{9}{10}$	0.9

Any five squares shaded

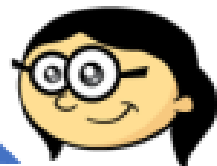
Any nine squares shaded

Dive Deeper

Who is correct?

1.2 is equivalent to 1 whole and 2 tenths.

Annie

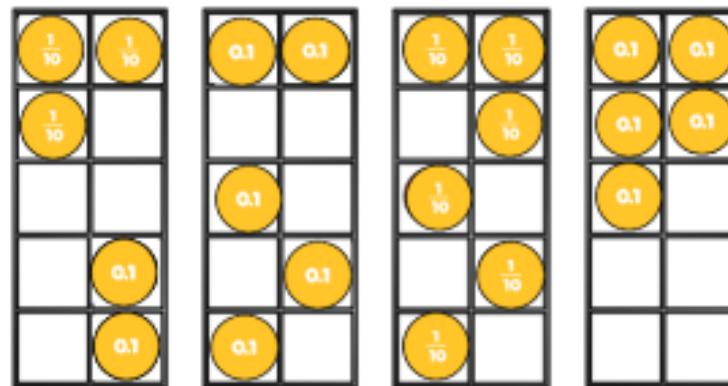


Dexter

1.2 is equivalent to 12 tenths.

Explain why.

Which ten frame is the odd one out?



Explain your answer.

six tens

six tenths

What is the same? What's different?
Show me.

Dive Deeper answers

Who is correct?

1.2 is equivalent to 1 whole and 2 tenths.

Annie



1.2 is equivalent to 12 tenths.

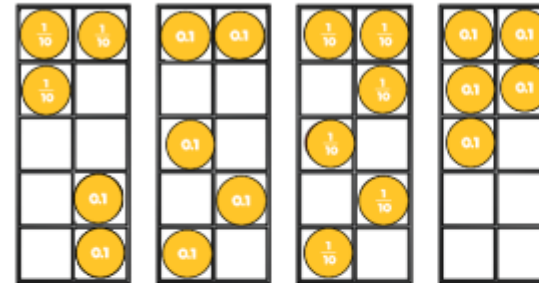


Dexter

Explain why.

Both children are correct.
1 whole is equal to 10 tenths so 1.2 is equal to 12 tenths.

Which ten frame is the odd one out?



Explain your answer.

Three of the ten frames represent 0.5



This ten frame is the odd one out because it represents 6 tenths not 5 tenths.

six tens

six tenths

What is the same? What's different?
Show me.

Children use concrete and pictorial representations to show the difference.

Self assessment – how did you do?

- SOME WILL EVEN use knowledge of tenths to explain an answer
- SOME will recognise equivalence between fractions, decimals, words and images
- MOST will write tenths as decimal numbers
- ALL will understand that a tenth is ten times smaller than one

Did you get DD1 right? Did you explain your answer?

Did you get chilli three right?

Do you know where to find tenths on a place value table?
Did you get chillies one and two right?

Can you explain this? Can you draw a picture to show it?