Hello Year 6,

Mrs Yeandle here. I hope you have had a fun Christmas. It was a Lego Christmas in my house, I received the Gingerbread House - which will become a Christmas decoration under our tree every year now. I may try to cheat and pack it up almost complete, so I don't need to build it all again next year!

For the first part of this half term we will be looking at decimals and percentages, linking back in to all the work we did last term on fractions.

Jan 4-08:53

LI: To read a decimal number and link it to a fraction

Hundreds	Tens	Ones	.	Tenths	Hundredths	Thousandths
100 100	10	1 1 1	.			

You are used to us presenting whole numbers in a place value chart.

For example, here you can see 213.

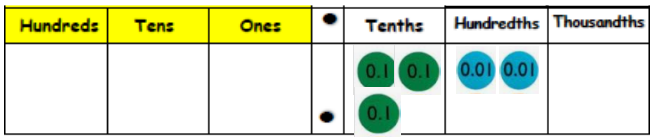
Hundreds	Tens	Ones	.	Tenths	Hundredths	Thousandths
			.	0.1 0.1		

However, the place value chart can also be used to represent fractions or parts of a whole number. These are our decimal numbers (also known as decimal fractions).

These are the parts of the number that are less than 1. So tenths, hundredths and thousandths.

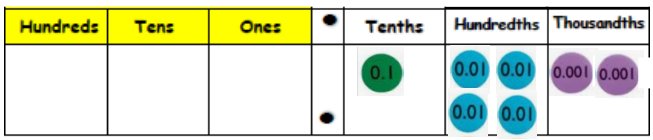
For example, here you can see 0.2, which is the same as $\frac{2}{10}$

Jan 4-08:58



This numbers has 3 tenths and 2 hundredths.

As a decimal we would write it as 0.32

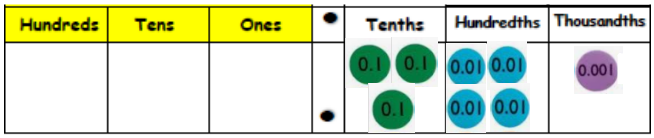


This number has 1 tenth, 4 hundredths and 2 thousandths.

As a decimal we would write it as 0.142

Jan 4-09:18

Can you fill in the gaps about the numbers represented here?

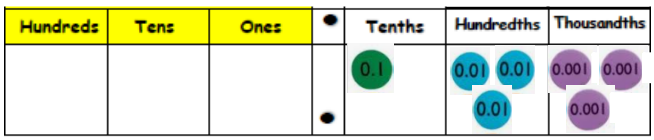


This number has ___ tenths,

___ hundredths and ___ thousandths.

As a decimal we would write it

_____



This number has ___ tenths,

___ hundredths and ___ thousandths.

As a decimal we would write it

_____

Jan 4-09:29

Can you draw in place value counters to show the numbers written at the side? Can you fill in the gaps about the number?

Hundreds	Tens	Ones	•	Tenths	Hundredths	Thousandths
			•			

This number has ___ tenths,
___ hundredths and ___ thousandths.
As a decimal we would write it
0.623

Hundreds	Tens	Ones	•	Tenths	Hundredths	Thousandths
			•			

This number has ___ tenths,
___ hundredths and ___ thousandths.
As a decimal we would write it
0.305

Jan 4-09:34

So $\frac{1}{10}$ as a decimal is written as 0.1

$\frac{1}{100}$ as a decimal is written as 0.01

$\frac{1}{1000}$ as a decimal is written as 0.001

Can you draw lines to match the fraction to the decimal?

$\frac{3}{10}$	$\frac{7}{100}$	$\frac{5}{1000}$	$\frac{70}{100}$
0.07	0.7	0.3	0.005

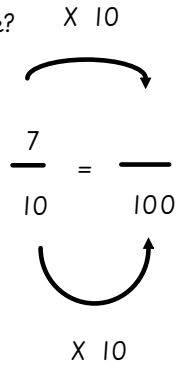
Jan 4-09:37

Did you find linking the 0.7 to $\frac{70}{100}$ the trickiest one?

Think back to our work on equivalent fractions.

Think what have we done to get from one denominator to the other.

Then do the same to the numerator.



Jan 4-09:43

$\frac{3}{10} = \frac{30}{100} = \frac{300}{1000}$ so $0.3 = 0.30 = 0.300$

$\frac{7}{10} = \frac{70}{100} = \frac{700}{1000}$ so _____

Can you write the decimal equivalents?

$\frac{5}{10} = \frac{\quad}{100} = \frac{\quad}{1000}$ so _____

Can you fill in the fraction and the decimal equivalents?

Jan 4-09:50

Some fractions are a bit trickier to turn into decimals.

$\frac{2}{5}$ is not in tenths, hundredths or thousandths

However, we can use our knowledge of equivalent fractions to turn it into tenths, hundredths or thousandths. Let's try tenths first.

$\frac{2}{5} = \frac{\quad}{10}$ (×2)

If we do the same to the numerator, we see that $\frac{2}{5} = \frac{4}{10}$

So, as a decimal $\frac{2}{5} = 0.4$

Jan 4-10:00

Let us try another

$\frac{1}{4} = \frac{\quad}{10}$ (× ?)

This does not work!

So, we can try hundredths.

$\frac{1}{4} = \frac{\quad}{100}$ (× 25)

$\frac{1}{4} = \frac{25}{100} = 0.25$

Jan 4-10:07

Can you convert these fractions into decimals? Remember, if they are in tenths or hundredths already they are easier to convert. However, you may need to convert your fraction into tenths or hundredths, before you can turn it into a decimal!

$\frac{4}{10} = \square$

$\frac{65}{100} = \square$

$\frac{3}{5} = \square = \square$

convert to tenths or hundredths first

$\frac{3}{4} = \square = \square$

convert to tenths or hundredths first

Jan 4-10:11

See if you can work your way through the examples and questions.

If you have a way of uploading your work, then you can email it to UKS2parents@epcollier.reading.sch.uk

If you can put in the subject bar your name and work for Mrs Yeandle - I should be able to access it!

If you are not able to do this but can print off your work, then it would be great to see it when you return to school.

Thank you Year 6,

From Mrs Yeandle

Jan 4-10:16