

Decimal numbers are a way of showing fractions of a whole. Here's a Place Value grid;

		'decimal places'	
ones	decimal point	tenths	hundredths
	•		
3	•	2	7
	•		
0	•	4	8
	•		
5	•	0	3
	•		
2	•	6	

written as	we say
3.27	three point two seven
0.48	zero point four eight
5.03	five point zero three
2.6	two point six

So, what does all this mean? Let's take the columns in order from left to right; First, we have the 'ones'. These are whole numbers, counting from 0 to 9. If we were to continue the grid to the left, the next column would be the 'tens', the next the 'hundreds', etc. All whole numbers.

Next, to the right of the 'ones', we have our 'decimal point'. This separates the whole numbers to the left and the fractions of a whole, to the right.

Remember, when we multiplied and divided numbers by ten and a hundred, the digits moved left and right, but the decimal point stayed put – it does not move!

To the right of the decimal point is the 'tenths' column. These are tenths of a whole – a whole divided into ten equal parts. Remember that when we move one column to the right, we are dividing by 10 each time (and to the left, multiplying by 10). 10 tenths = 1 whole.

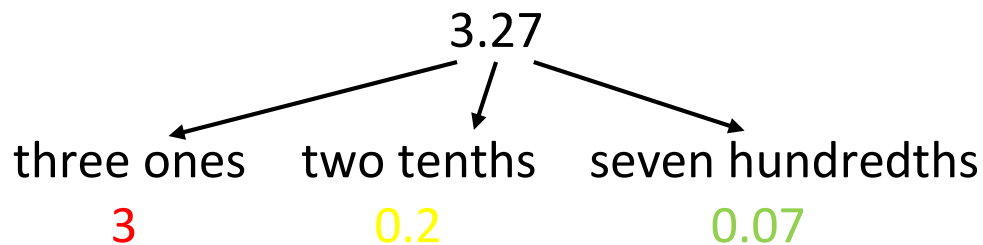
Then there are the 'hundredths'. Being the next column to the right of the tenths, we divide by 10 again. 100 hundredths = 1 whole. 10 hundredths = 1 tenth. If we were to continue to the right, the next would be the thousandths (1000 thousandths = 1 whole).

The eagle-eyed amongst you will have noticed the words 'decimal places' on the top row of the grid. This tells us how many digits there are to the right of the decimal point. In the first three examples, there are two digits, so two decimal places. In the final one there is one digit, so one decimal place.

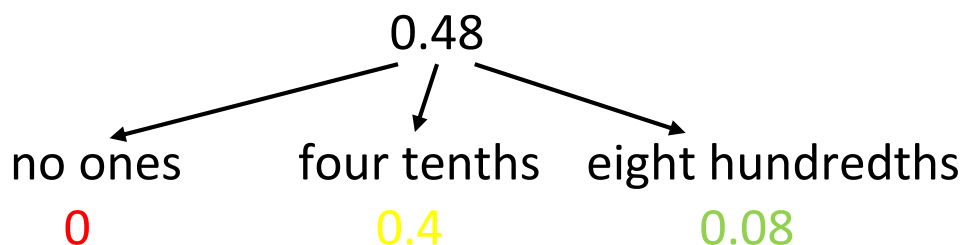


Let's think about what these squiggles are worth. We are going to do this by partitioning the numbers included in the Place Value grid'

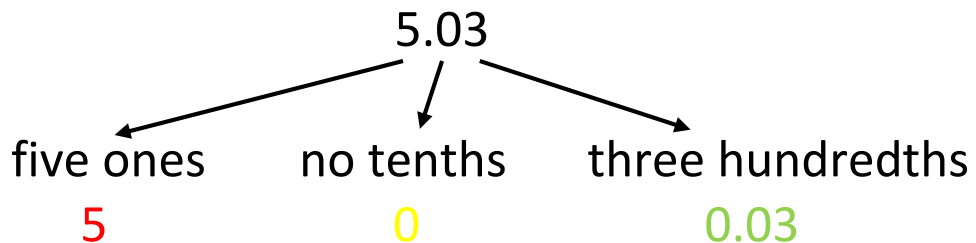
We'll start with 3.27. You can see, that we say 'three point two seven', **not** 'three point twenty seven'. We are going to partition this number...



Next, 0.48 'zero (or nought) point four eight'.



Then, 5.03 'five point zero three'.



And finally, 2.6 'two point six'.

