8. Multiplying with <gulp> FRACTIONS!

Let's go back and look at what multiplication means:

2 x 3 means 2 groups of 3 (or 3 groups of 2)

Often you can think of the multiplication sign as meaning 'of'.

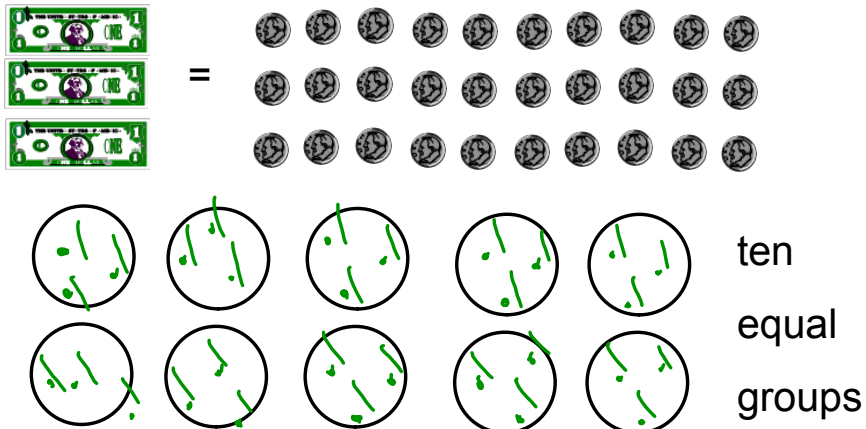so what does

$\frac{1}{10}$ x 3   actually mean?

It can mean 1/10 of 3 (or it can mean 3 of 1/10)

Multiplication is associative, so it shouldn't matter which one we choose (and often we'll choose the easiest one, right?). Let's try them both ways:

1/10 of 3: 1/10 of 3 means split 3 into 10 equal groups, and then take one of those groups. Let's think about this as money:

ten

equal

groups

one tenth would be ONE of these ten groups. SO, 1/10 OF 3 = 3/10

The other way: **3 OF 1/10:**
3 groups of 1/10

   =   3/10