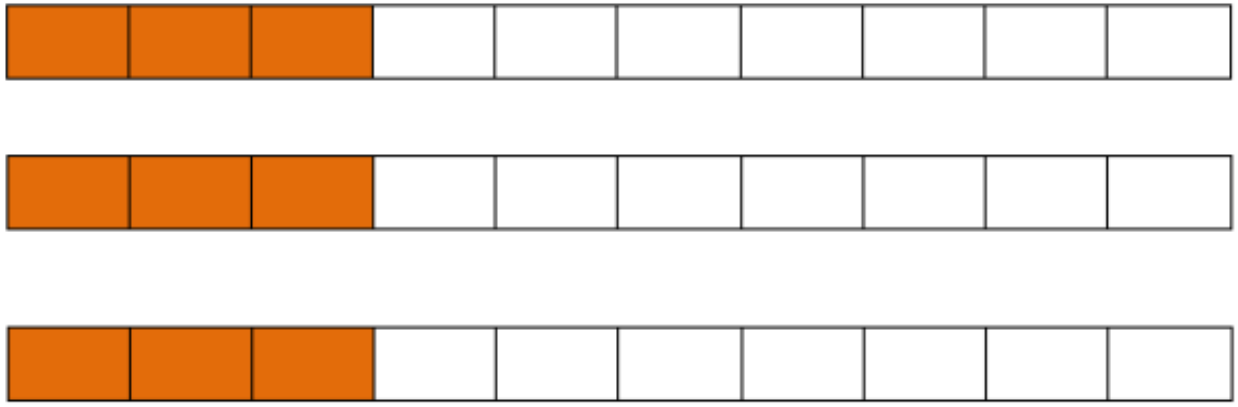
Can I multiply fractions by whole numbers?

$3 \times \frac{3}{10} =$

Let's have a look at how we can show this visually using a bar model.

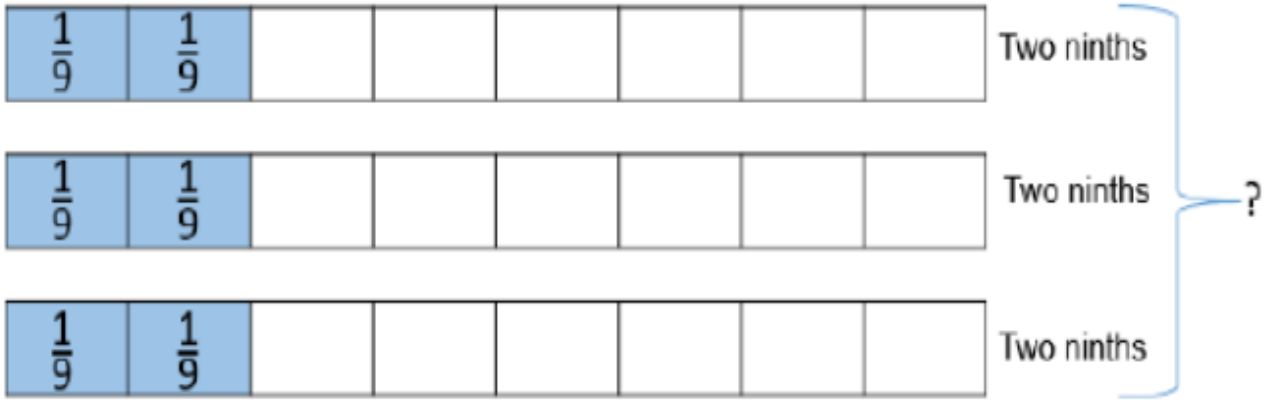


$3 \times \frac{3}{10} = \frac{9}{10}$

Using the bar model you can use repeated addition.

You can also use a calculation to work this out too.
The denominator stays the same. You are multiplying the numerator!

Count the number of ninths to work out 3 x $\frac{2}{9}$



Our bars must have 9 intervals because we are x by ninths (denominator)

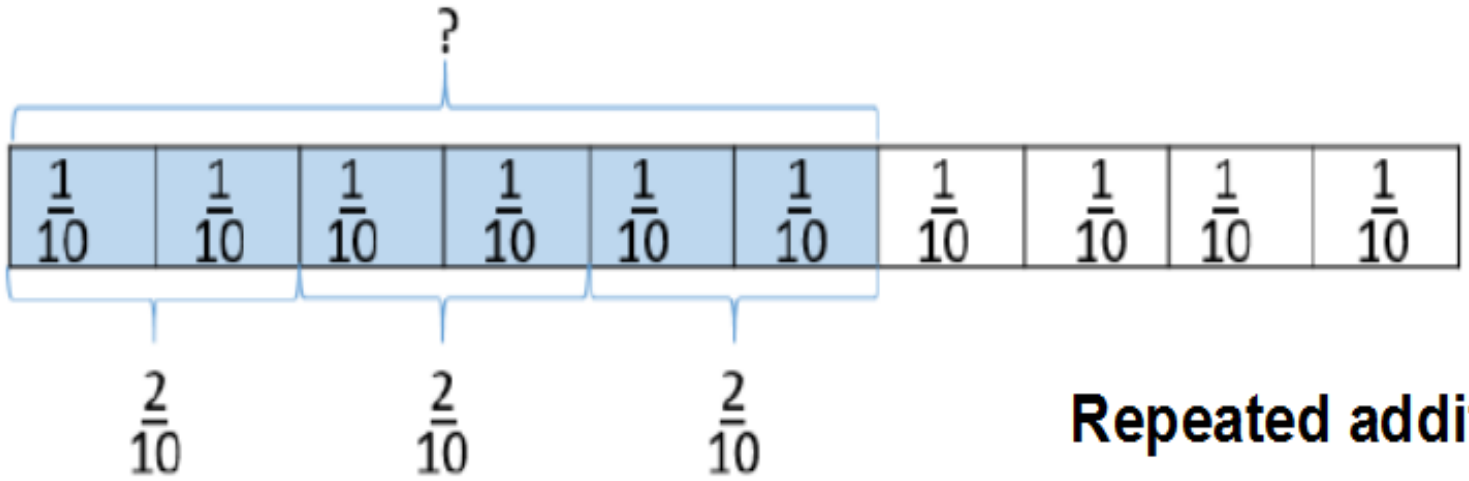
The numerator will be the value which will change in a multiplication

Repeated addition $\frac{2}{9} + \frac{2}{9} + \frac{2}{9} = \frac{6}{9}$

Mulktiplication $\frac{2}{9} \times 3 = \frac{6}{9}$

I can also solve these questions using just one bar model like this one below.

$3 \times \frac{2}{10} =$



Repeated addition

Multiplication

Today's Task **All groups**

Decide on which bar model method to use and solve the following questions.

$\frac{3}{8} \times 2$ $\frac{5}{16} \times 3$ $4 \times \frac{2}{11}$

$\frac{2}{7} \times 3$ $\frac{3}{16} \times 4$ $2 \times \frac{5}{12}$

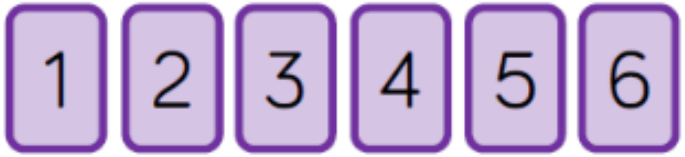
$\frac{3}{10} \times 3$ $\frac{2}{7} \times 2$ $4 \times \frac{3}{20}$

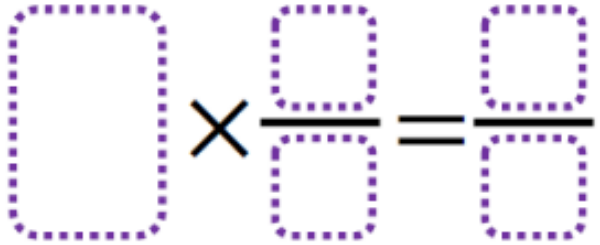
Challenge Questions

All of Mrs Wingfield's and Ms Baldwin's group should try these!

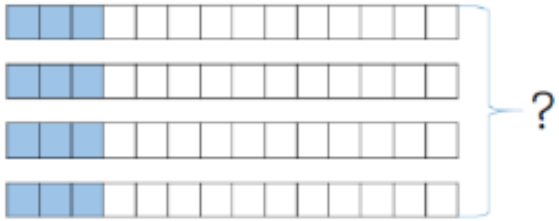
Mr King's group - try them if you finished the previous task quickly.

Use the digit cards to complete the multiplication.





Denise has calculated $4 \times \frac{3}{14}$



From the picture I can see that $4 \times \frac{3}{14} = \frac{12}{56}$

Do you agree?

Explain why.