

# LO To multiply by 11 and 12

## Flashback 4

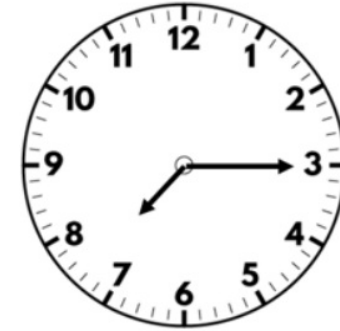
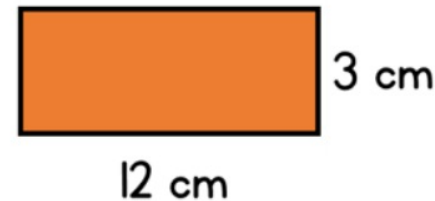
Year 4 | Week 1 | Day 1

1) What is  $10 \times 7$ ?

2) Work out  $90 \div 10$

3) What is seven multiplied by one?

4) Find the perimeter of the rectangle.



## LO To multiply by 11 and 12

There are 11 players in a football team.



How many players are in 4 teams?



Think: What sum do we need to do?  
How could we represent this?

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There are 11 players in a football team.



How many players are in 4 teams?

You could use repeated addition, or multiplication to solve this.

$$\boxed{11} + \boxed{11} + \boxed{11} + \boxed{11} = \boxed{44}$$

$$\boxed{4} \times \boxed{11} = \boxed{44}$$

$$\boxed{11} \times \boxed{4} = \boxed{44}$$



Think: did anyone think of using place value counters to represent this problem?  
What would you draw?

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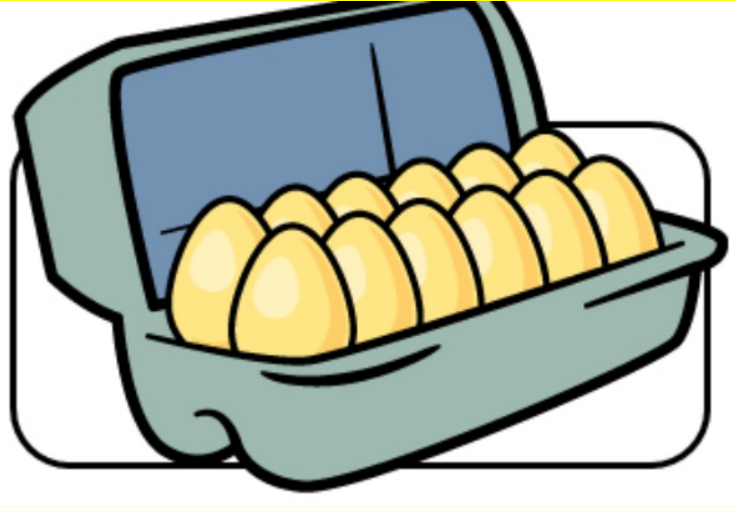
You could use place value counters like this:



Tip: you could count up all the tens then all the ones:

$$40 + 4 = 44$$

## LO To multiply by 11 and 12



An egg box holds 12 eggs.  
How many eggs would  
there be in 5 boxes?



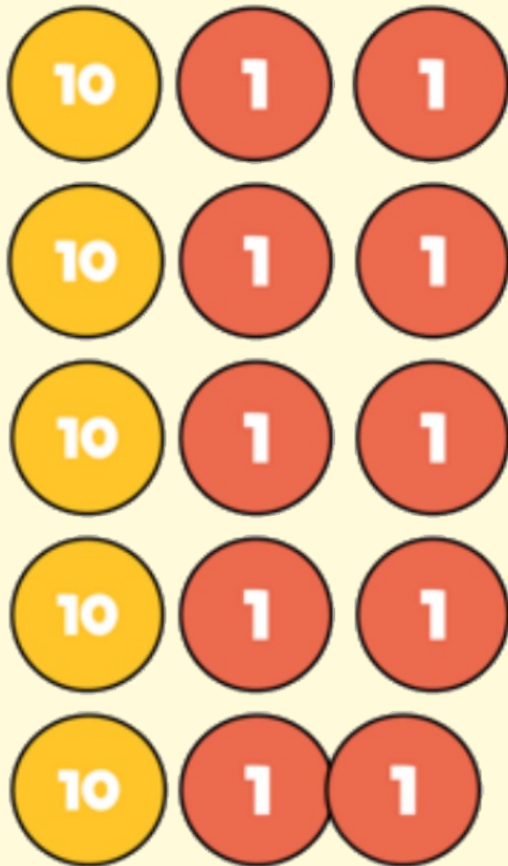
What sum do we need to do?  
How could you represent this?

# LO To multiply by 11 and 12



An egg box holds 12 eggs.  
How many eggs would  
there be in 5 boxes?

Click to reveal PV counters



$$50 + 10$$

$$\boxed{5} \times \boxed{12} = \boxed{60}$$

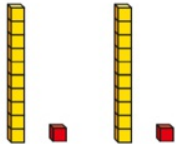



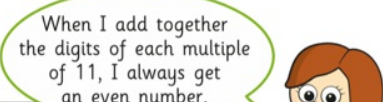
$$\boxed{12} \times \boxed{5} = \boxed{60}$$

$$12 + 12 + 12 + 12 + 12 = 60$$

# LO To multiply by 11 and 12

We have looked at different ways of solving multiplication problems. Now it's your turn

Stick one of the sheets in your book and complete the questions.

<b>Tue More practice</b> 1. This base ten model shows you $11 \times 2$ . Use your own base ten to solve $11 \times 3$ . Draw your model in your book and complete the sum.   Copy these sums into your book. Draw a model to represent each sum (you could use place value counters OR base ten). 2. $5 \times 11 =$ 3. $11 \times 4 =$ 4. $12 \times 3 =$ 5. $4 \times 12 =$	<b>Tue Feeling confident</b> 1. Use base ten to build the 12 times table. For example:  $3 \times 12$  Copy and complete these sums in your book. Use your models on your table to help you. 2. $12 \times 5 =$ 3. $12 \times ? = 120$ 4. $? = 9 \times 12$ 5. $48 \text{ divided by } 12 =$ 6. $12 \times ? = 132$ 7. $? \text{ divided by } 12 = 8$	<b>Tue Challenge Me</b> 1. Use base ten to build the 12 times table. For example:  $3 \times 12$  Copy and complete these sums in your book. Use your models on your table to help you. 2. $12 \times 7 =$ 3. $12 \times ? = 108$ 4. $? = 8 \times 12$ 5. $48 \text{ divided by } 12 =$ 6. $12 \times ? = 120$ 7. $? \text{ divided by } 12 = 8$
<b>Reasoning</b> Crayons come in packs of 12. Dora buys 5 packs of crayons. How many crayons will she have? 	<b>Reasoning</b> Mia is spotting patterns in the 11 times table. 	<b>Reasoning</b> Mr Scott is organising a cricket tournament. a) There are 11 players in a cricket team. 5 teams have signed up for the tournament. How many players have signed up? b) Mr Scott needs 132 players signed up to go ahead with the tournament. How <b>many more</b>



Dexter has been looking at the 12 times-table.

He notices something when he adds the digits of the multiples of 12 together.



$$\begin{array}{l} 1 + 2 = 3 \\ 2 + 4 = 6 \\ 3 + 6 = 9 \\ 4 + 8 = 12 \end{array}$$

a) Dexter thinks the next number in the pattern will be 15

Is he correct? \_\_\_\_\_

Explain your answer. \_\_\_\_\_



Dexter has been looking at the 12 times-table.

He notices something when he adds the digits of the multiples of 12 together.



$$\begin{array}{l} 1 + 2 = 3 \\ 2 + 4 = 6 \\ 3 + 6 = 9 \\ 4 + 8 = 12 \end{array}$$

a) Dexter thinks the next number in the pattern will be 15

Is he correct? No

Explain your answer.  $6 + 0 = 6$