06.01.21

# IALT: multiply and divide 11 and 12.

248 -100 =

6 x 100 =

483 + 70 =

578 - 43 =

300 x 8 =

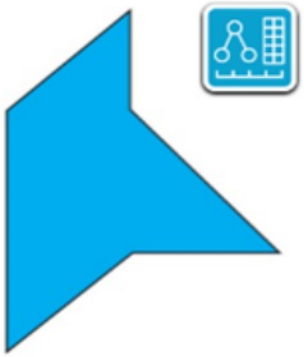
63 ÷ 7 =

$\frac{8}{10} + \frac{1}{10} =$

276 + 100 =

**Challange**

1 Raj makes this shape with two different quadrilateral pieces of paper.



What shapes could they have been?

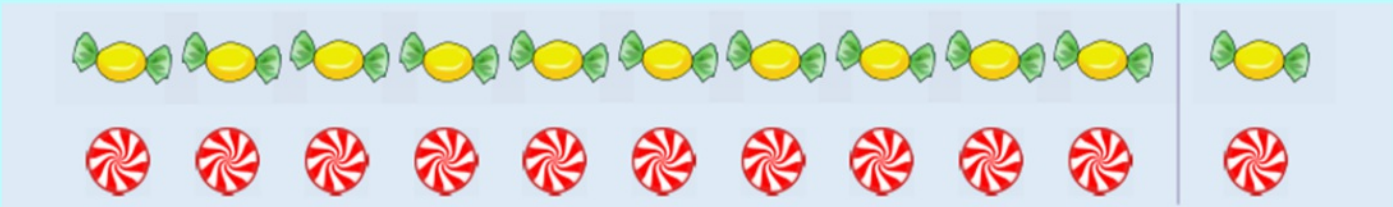
https://www.topmarks.co.uk/maths-games/daily10

# Daily Counting

6

11

12

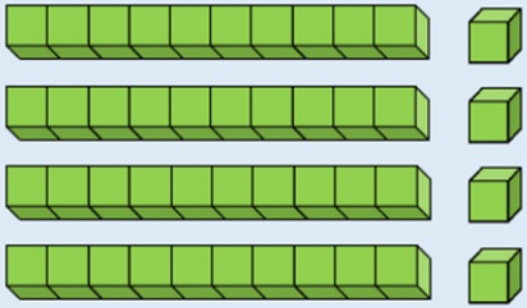


2 lots of 10 and 2 lots of 1 is the same as 2 lots of __

What other timestable can you see?

What is the pattern?

3 lots of 10 add 3 lots of 1 = __ x 11



4 x 11 = 44

Is this the same as the cookie and sweets?

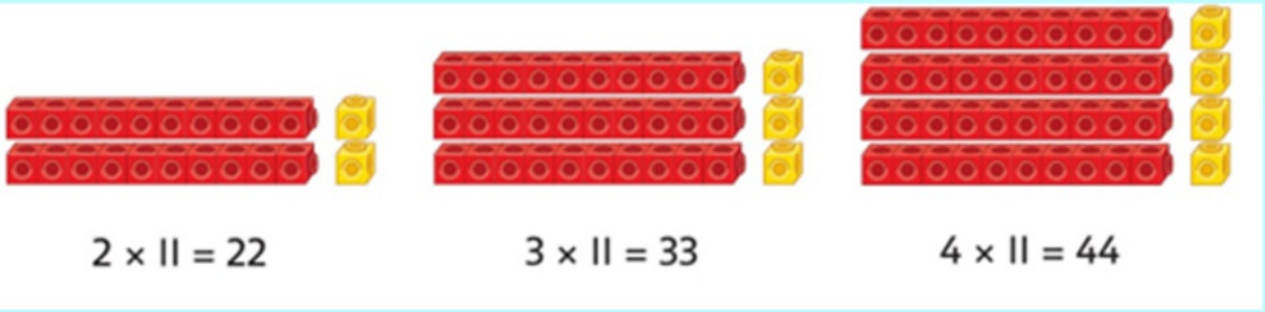
Why?

10 x 4 = 40

1 x 4 = 4

10 + 1 = 11

40 + 4 = 44




Is there a pattern?

What can we see from this?

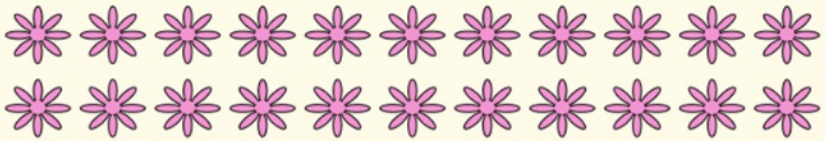
How would you represent this for:

5 x 11

10 x 11

9 x 11

In division do we follow the same rule:



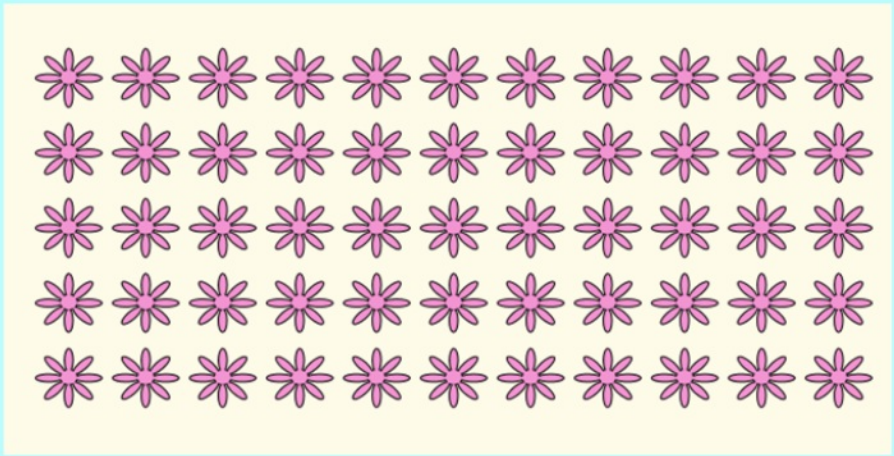
How many flowers are there?

What is the number of groups its in?

Write the number sentence.

How can we use our 10 and 1 times table to help us?

In division do we follow the same rule:



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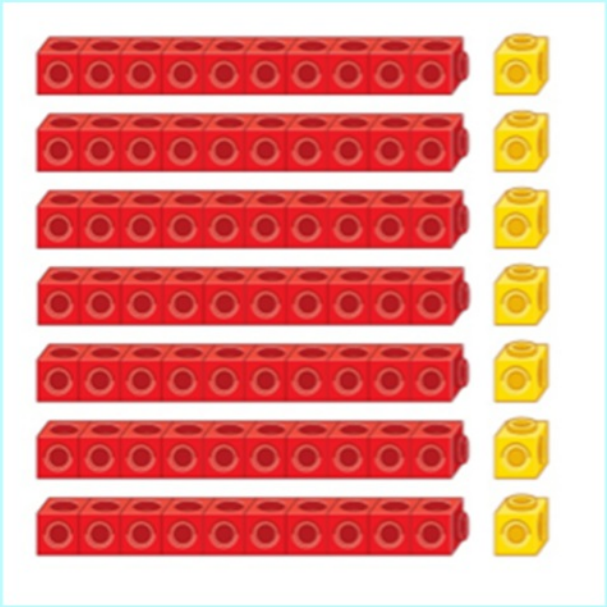
WOW! Lets turn this now into a word question:



7 x 11 = 77

Question:
I have 7 friends and I give them 11 sweets each. How many sweets have I given away all together?

Why have I asked "How many sweets have I given away all together?" What is it asking me to do?

## Mild:

$2 \times 10 =$ ___ $2 \times 1 =$ ___

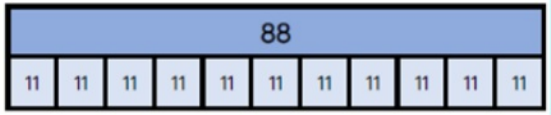
2 lots of 10 doughnuts = ___ 2 lots of 1 doughnut = ___

2 lots of 11 doughnuts = ___

$2 \times 10 + 2 \times 1 = 2 \times 11 =$ ___

## Spicy:

Rosie uses a bar model to represent 88 divided by 11




Explain Rosie's mistake.

Can you draw a bar model to represent 88 divided by 11 correctly?

# Answers

## Mild:

$2 \times 10 =$ 20

$2 \times 1 =$ 2

2 lots of 10 doughnuts = 20

2 lots of 1 doughnut = 2

2 lots of 11 doughnuts = 22

$2 \times 10 + 2 \times 1 = 2 \times 11 =$ 22

## Spicy:

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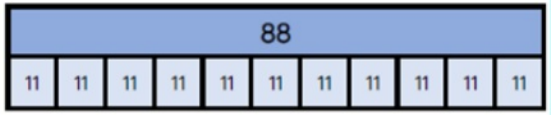


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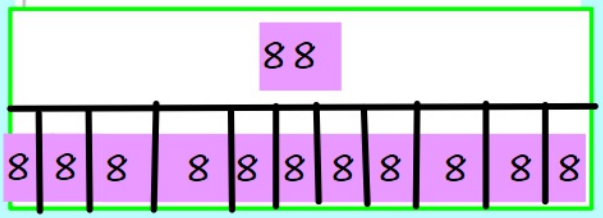
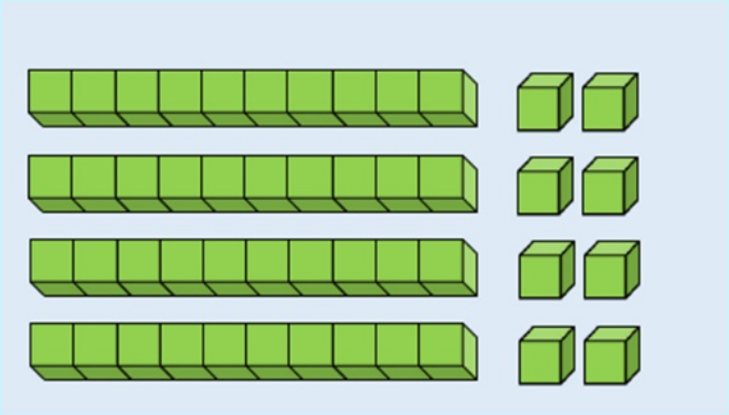


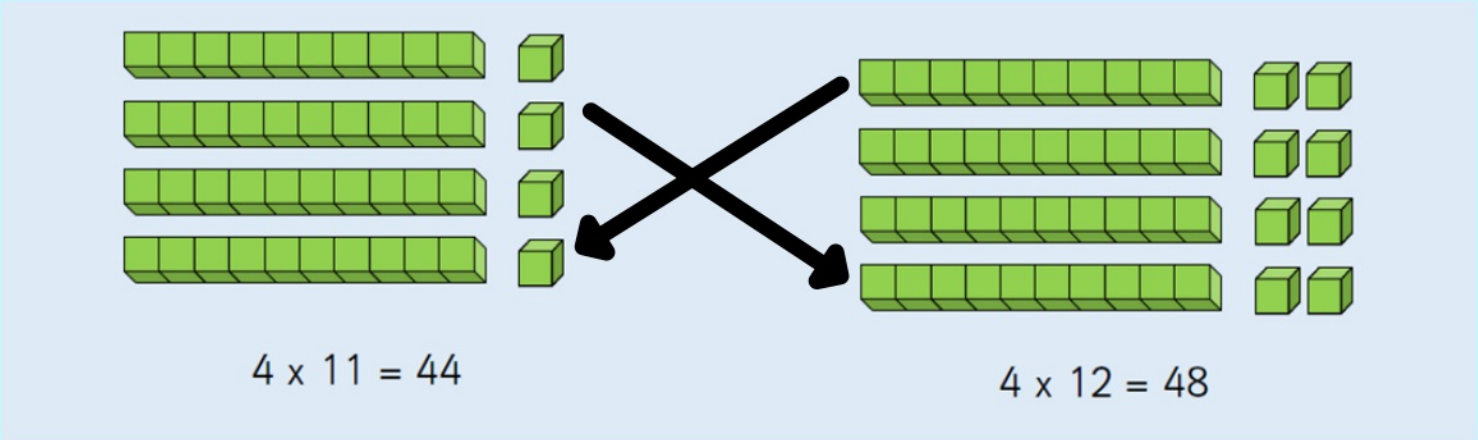
Do you recall what we did with the 11 times table?



Now try this with 12!

What pattern can you see?

What can we see here?

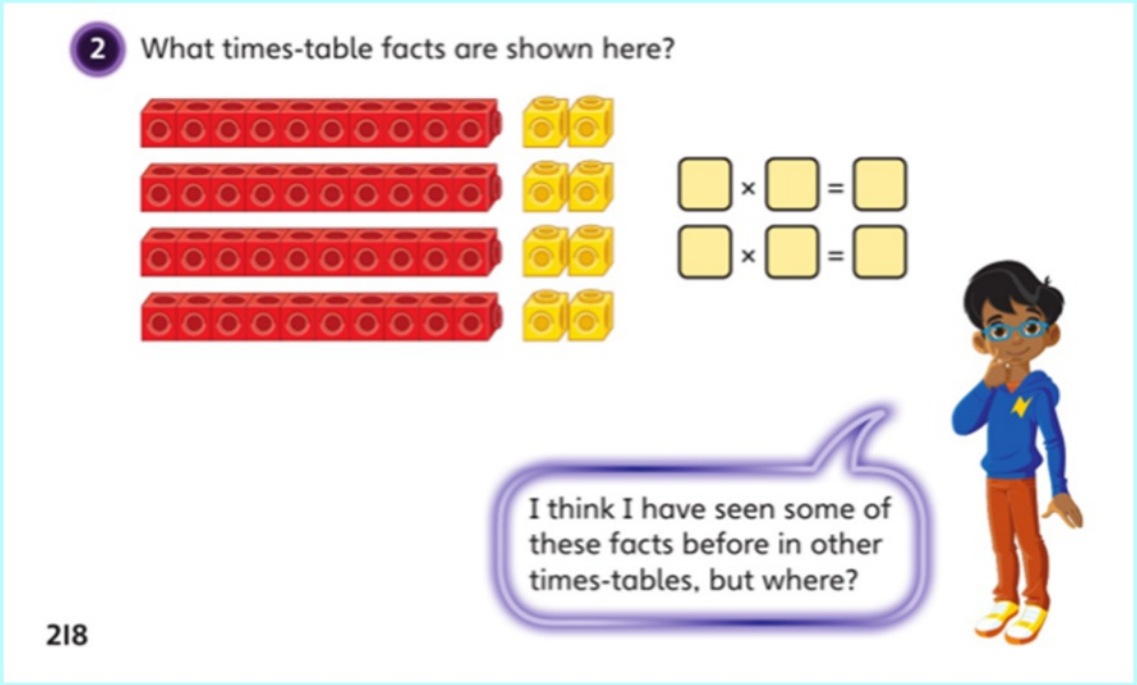



Is there a pattern?

Why do you think this happens?

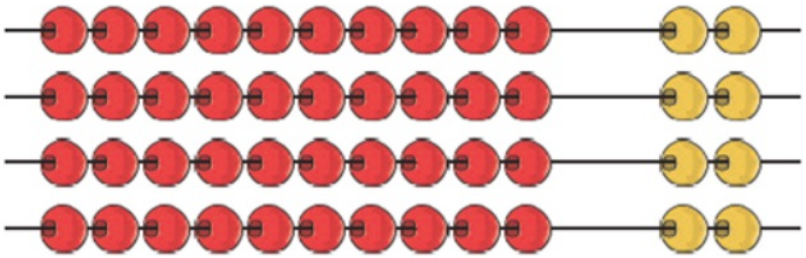
Can you explain how this would help you?

Where else have we seen this?




Could we use our number knowledge to work this out?

**1)** Complete the sentences and calculation to match the picture.



4 lots of 10 beads = _____

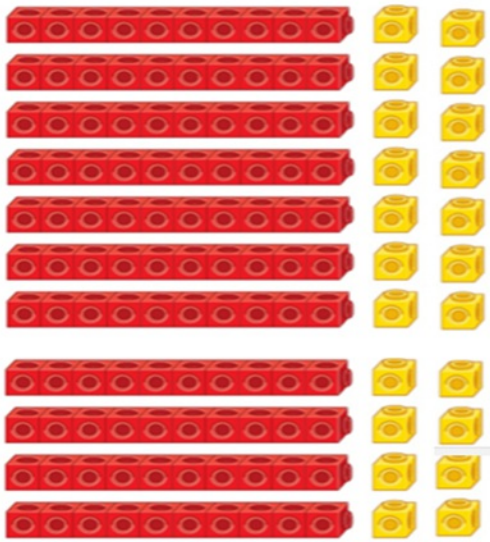
4 lots of 2 beads = _____

4 lots of 12 beads = _____

4 × 10 + 4 × 2 = 4 × 12 = _____

How is breaking it down showing you the pattern?

WOW! Lets turn this now into a word question:

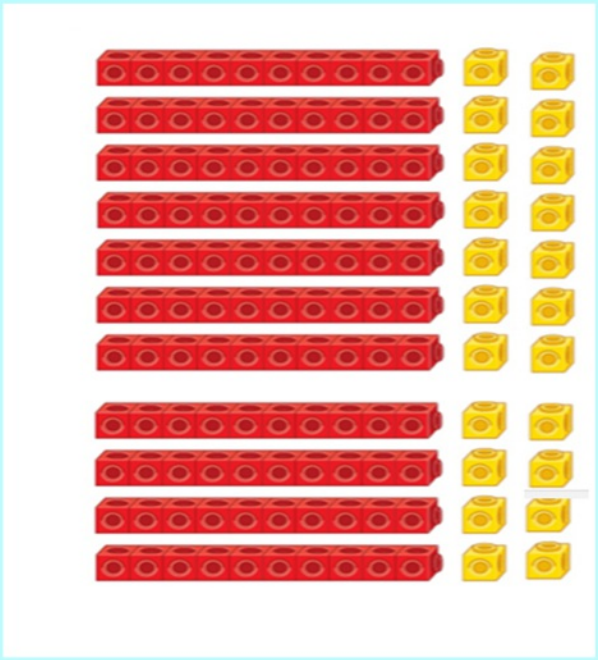


12 x 11 = 132

Question:
I have 11 friends and we all have 12 marbles. If we put all the marbles in the middle how many will we have?

Why have I asked "If we put all the marbles in the middle how many will we have?" What is it asking me to do?

WOW! Lets turn this into a word question:



132÷12= 11

Question I have made:
I had 132 pencils and I gave them equally out to 11 students. How many pencils would they get each?

Why have I asked "I had 132 pencils and I gave them equally out to 11 students" What is it asking me to do?

## Mild:

Complete the calculations.

12 × 5 = 60  5 × 12 = 60  48 ÷ 12 = 4  84 ÷ 12 = 7

12 × 10 = 120  12 × 11 = 132  96 ÷ 12 = 8  108 = 9 × 12

## Spicy:

**b)** Work out these multiplications. Use the other times-tables to help you.

4 × 12 = 48  9 × 12 = 108  16 × 12 = 192

## Hot:

4 x 12 = 48

7 x 12 = 84

96 ÷ 12 = 8

60 ÷ 12 = 5

12 ÷ 12 = 1

5 x 12 = 60

9 x 12 = 108

180 ÷ 12 = 15