Welcome to Year 3 live maths lesson

The session will begin at 11.05

Turn your camera and microphone off please

Ark Curriculum+

Monday 11th January 2021
REMOTE LEARNING

Year 3 Unit 6: Multiplication and division

Lesson 3: multiplication of four

Mathematics
Mastery

Let's say the counting by 4's song

Do now

Key learning: I will know how to recall the multiplication table of four by skip counting

Star Words

multiply

skip counting

times

multiplication

group

multiple

product

Say the hidden number

Do now

Say the hidden number

Do now

Say the hidden number

Do now

Say the hidden number

Do now

Say the hidden number

Do now

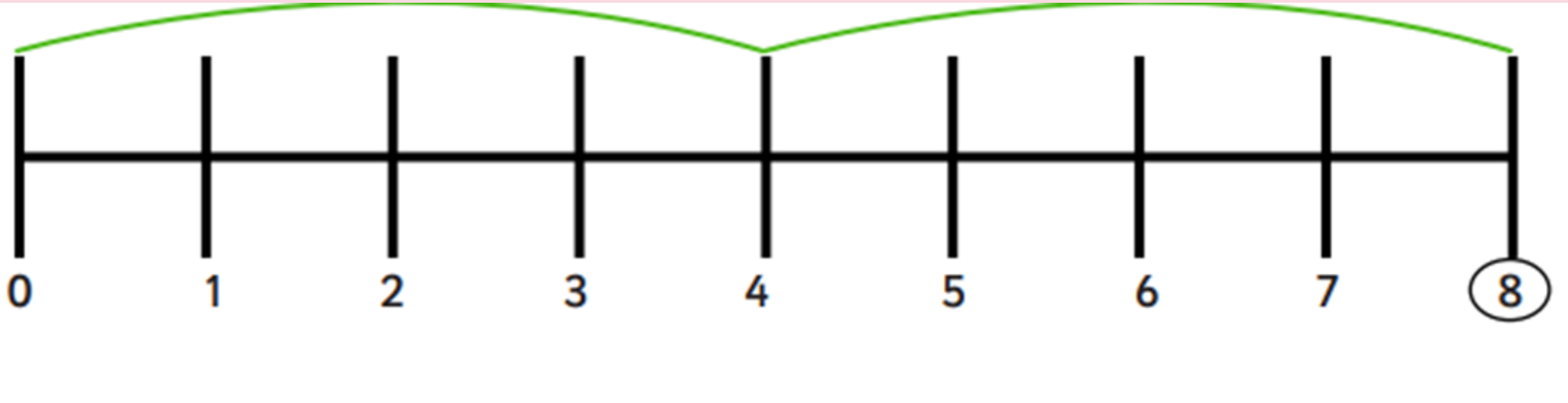
Write down the missing numbers.
Now skip count in 3s to your grown up

Do now

My turn

Let's skip count in 4s

Say the number out loud that we land on and write it down

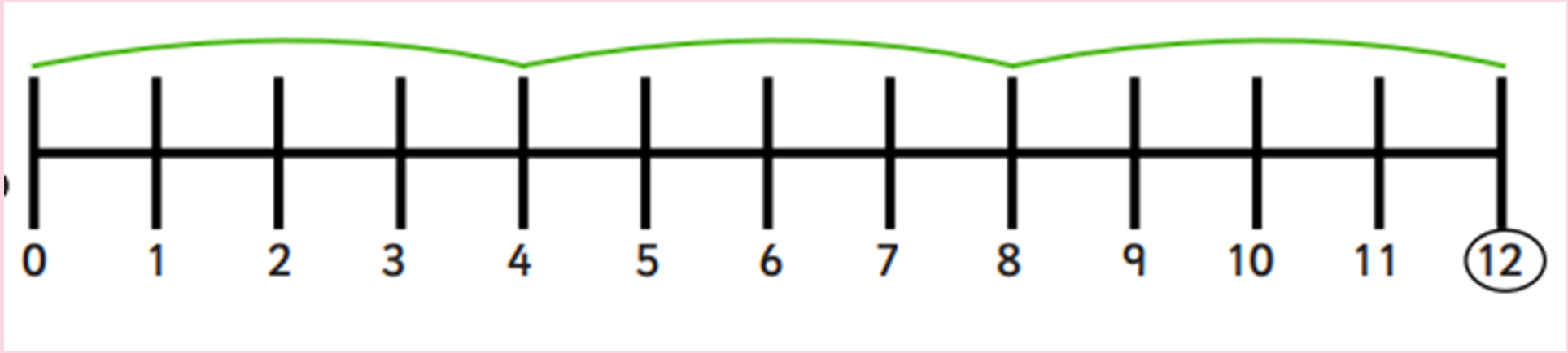


New learning

Our turn

Let's skip count in 4s

Say the number out loud that we land on and write it down..



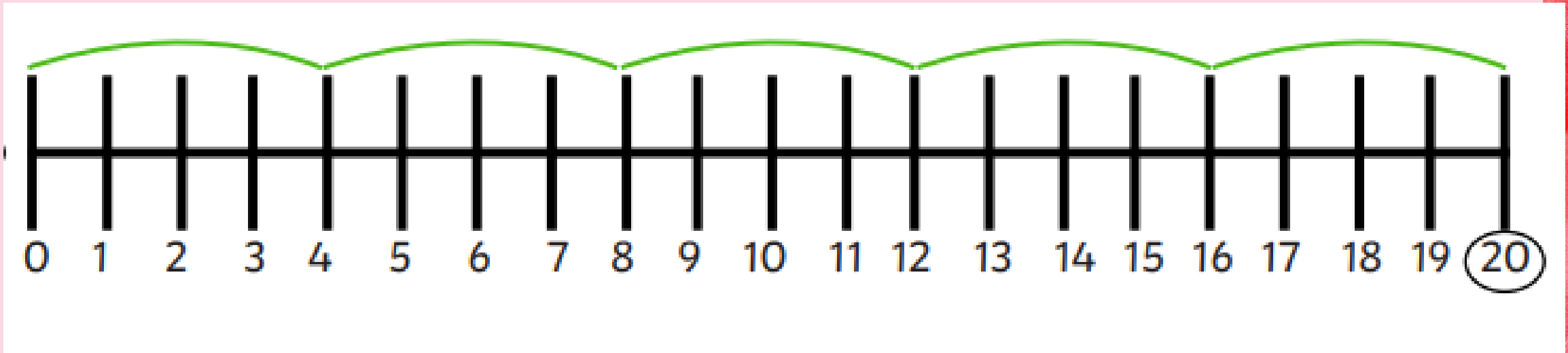
New learning

Your turn

Write down the numbers that we jump on

Be ready for a cold call!

Say the number out loud that we land on and write them down.



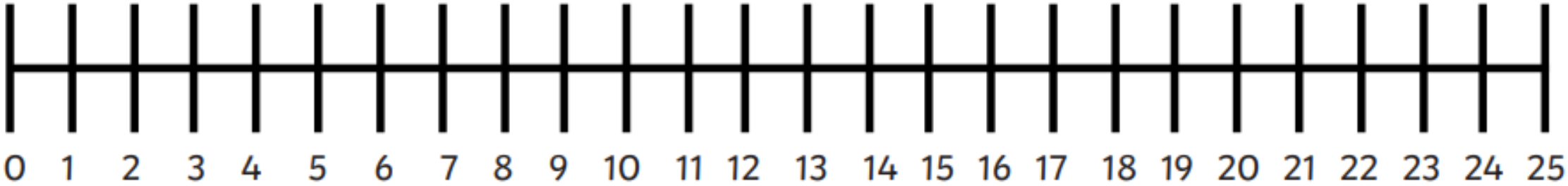
New learning

My turn

The tubes of paint are in groups of 4's count them in jumps on the number line

Say the number out loud that we land on and write them down.

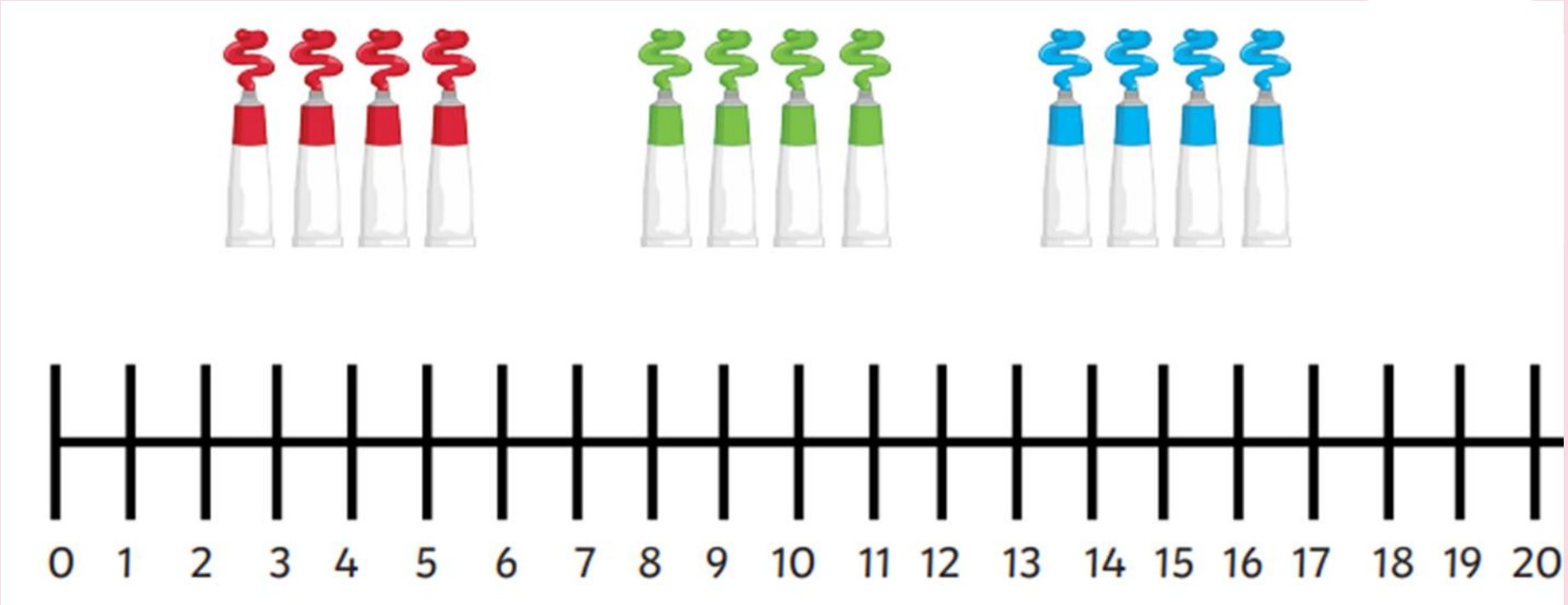
New learning



your turn

The tubes of paint are in groups of 4's count them in jumps on the number line

Say the number out loud that we land on and write them down.



New learning

The product

The **product** is the result of multiplying.

Circle the product in each equation.

4 x 2 = 8

4 x 3 = 12

4 x 4 = 16

New learning

Your turn

The product

The **product** is the result of multiplying.

Write down the number which is the product for each calculation.

$4 \times 5 = 20$

$4 \times 6 = 24$

$4 \times 7 = 28$

$32 = 4 \times 8$

$36 = 4 \times 9$

$4 \times 10 = 40$

New Learning

The product is the answer!

Multiples

New learning

A **multiple** is the result you get when you multiply a number by another number. .

Which of these are multiples of 4?

8

6

20

12

17

16

10

The number of times!

How could you prove it?

Be ready for a cold call!

Key learning: I will know how to recall the multiplication table of four by skip counting

There are 4 biscuits in each jar.

How many biscuits are there in 5 jars?

□ × □ = □

There are 4 children sitting at each table.

How many children are sitting at 3 tables?

□ × □ = □

There are **4 stamps in each of the hand's of 10 children**

How many stamps do they have altogether?

□ × □ = □

There are 4 pencils in each pot.

How many pencils are there in 9 pots?

□ × □ = □

Write the equation to match the picture, solve x equations

a)  ____ × ____ = ____

b)  ____ × ____ = ____

4 x 10 =

4 x 11 =

4 x 12 =

Independent Task

Feedback

Was there anything you found tricky?

Was there anything you thought you did well with?

How can we help you?

Plenary

Welcome to Year 3 live maths lesson

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Ark Curriculum+

Tuesday 12th January 2021
REMOTE LEARNING

Year 3 Unit 6: Multiplication and division

Lesson 5 arrays of 3 and 4

Mathematics
Mastery

DO NOW

Each ring of my magic Indian bell you count **3 more.**
What is the answer?

Each ring of my magic Indian bell you count **4 more.**
What is the answer

Do now

Key learning:

I will know how to describe and interpret arrays for the multiplication tables of three and four

Star Words

array

multiply

divide

groups

part

whole

Review
solve by skip counting in 3s or 4's

Explain to your grown up how you solved them.

3 x 2 =

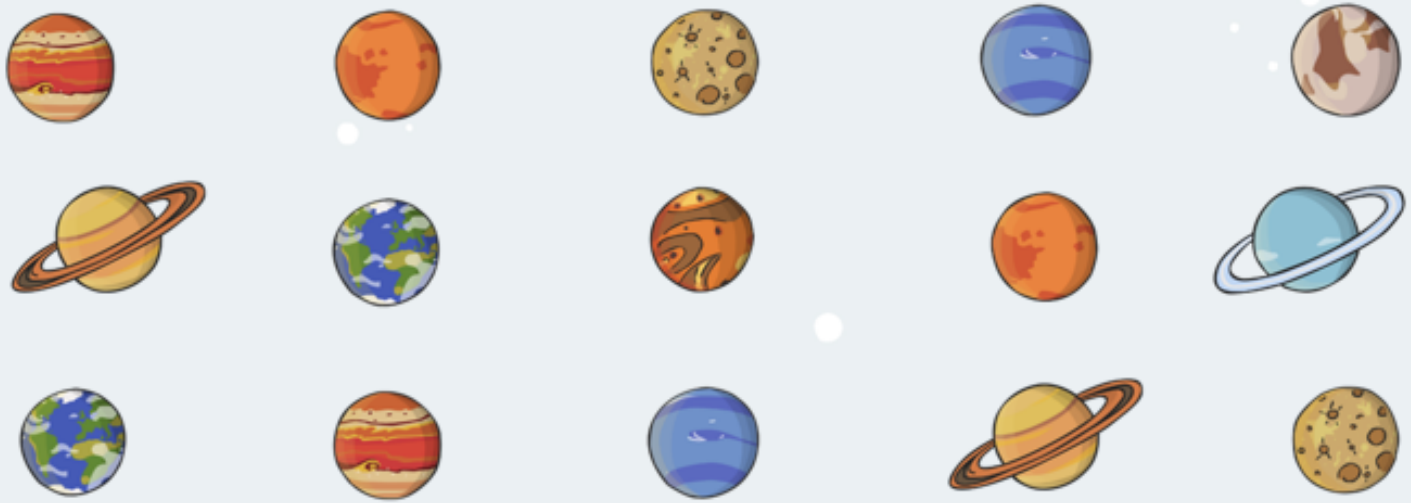
4 x 2 =

3 x 3 =

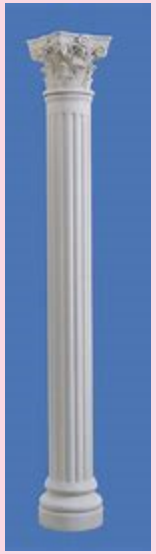
4 x 3 =

What Is an Array?

When pictures or objects are put into columns and rows, it is called an array. They can help us to count objects more efficiently.



$3 \times 5 = ?$



Columns go up and down.

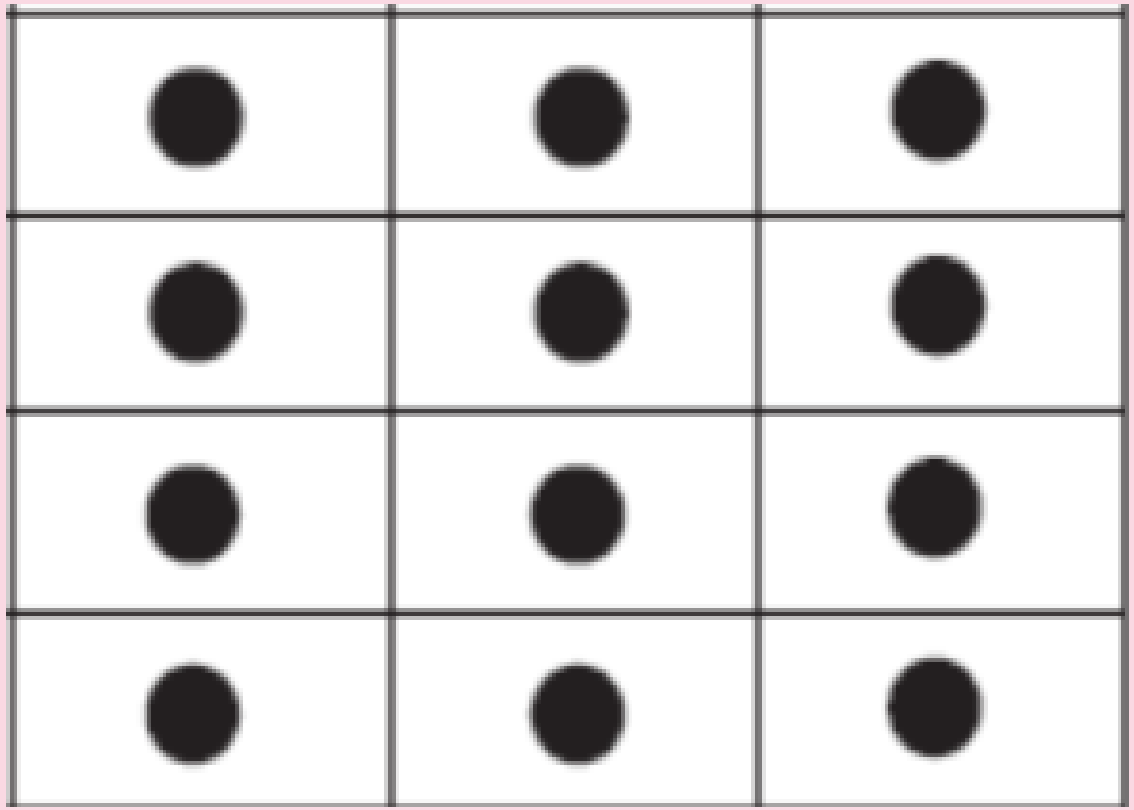
Rows go side to side.

New learning

Let's practise counting using arrays

My turn - First I will check how many dots are in each row

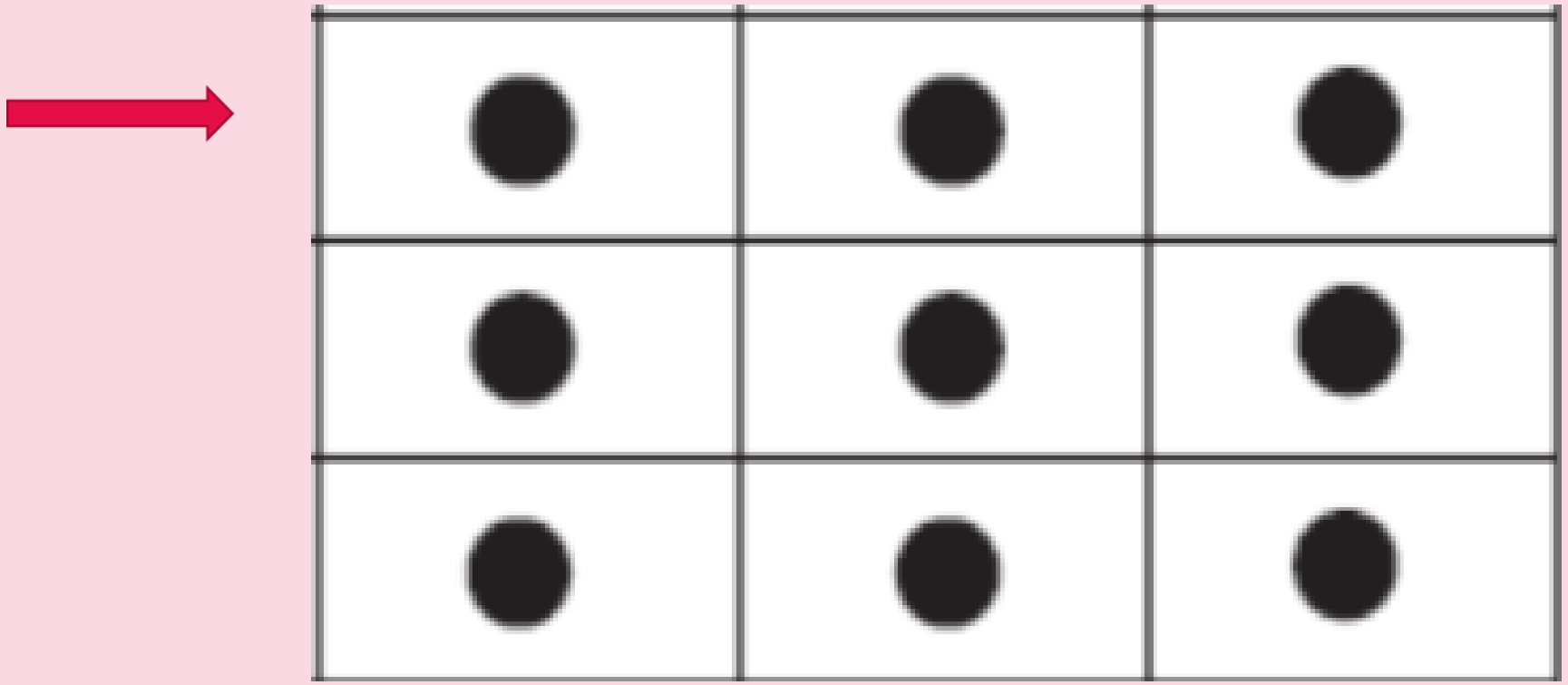
I will count the rows



New learning

Let's practise counting using arrays

Our turn - We will count the rows

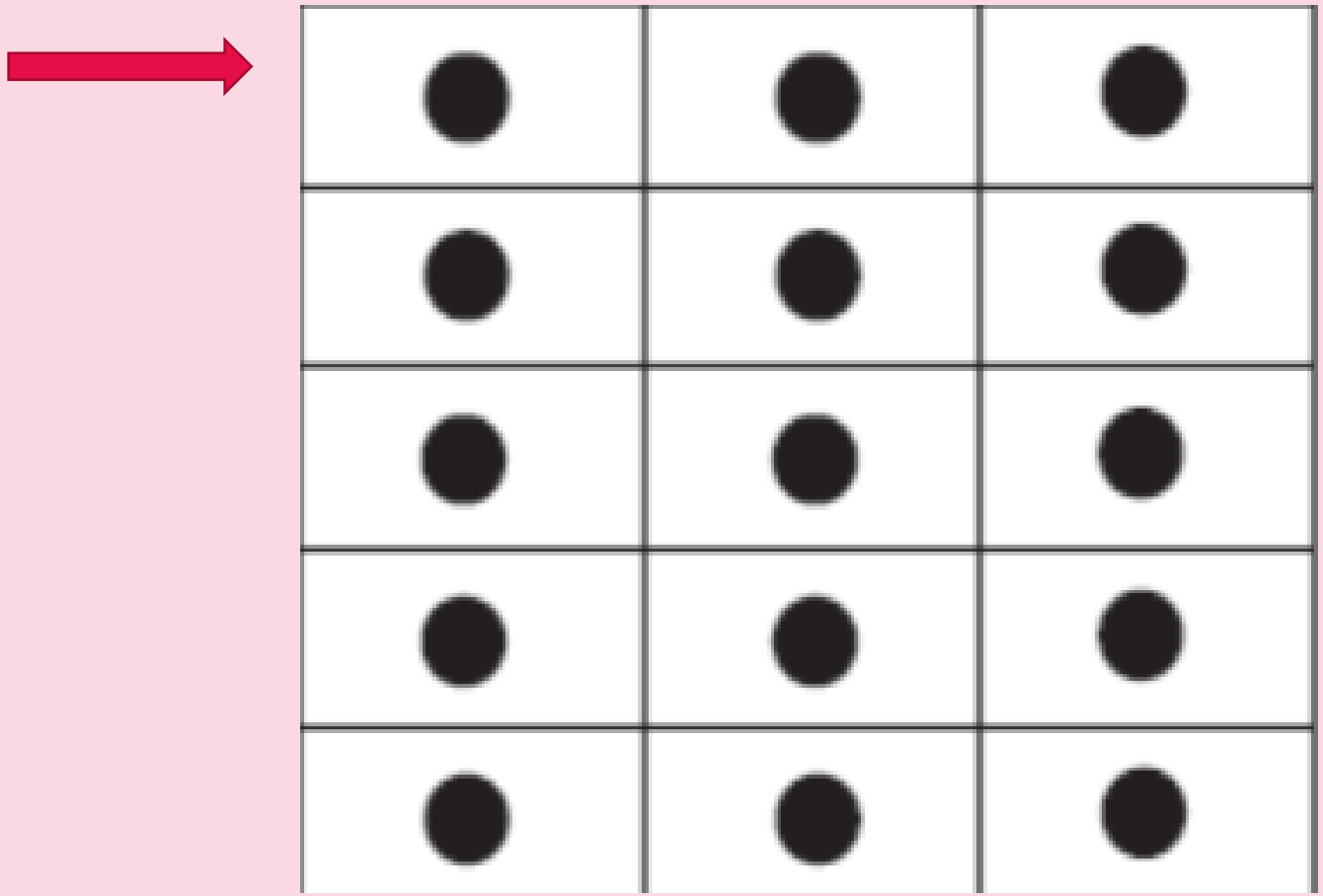


New learning

Your turn -

You will count the rows and write down your answer.

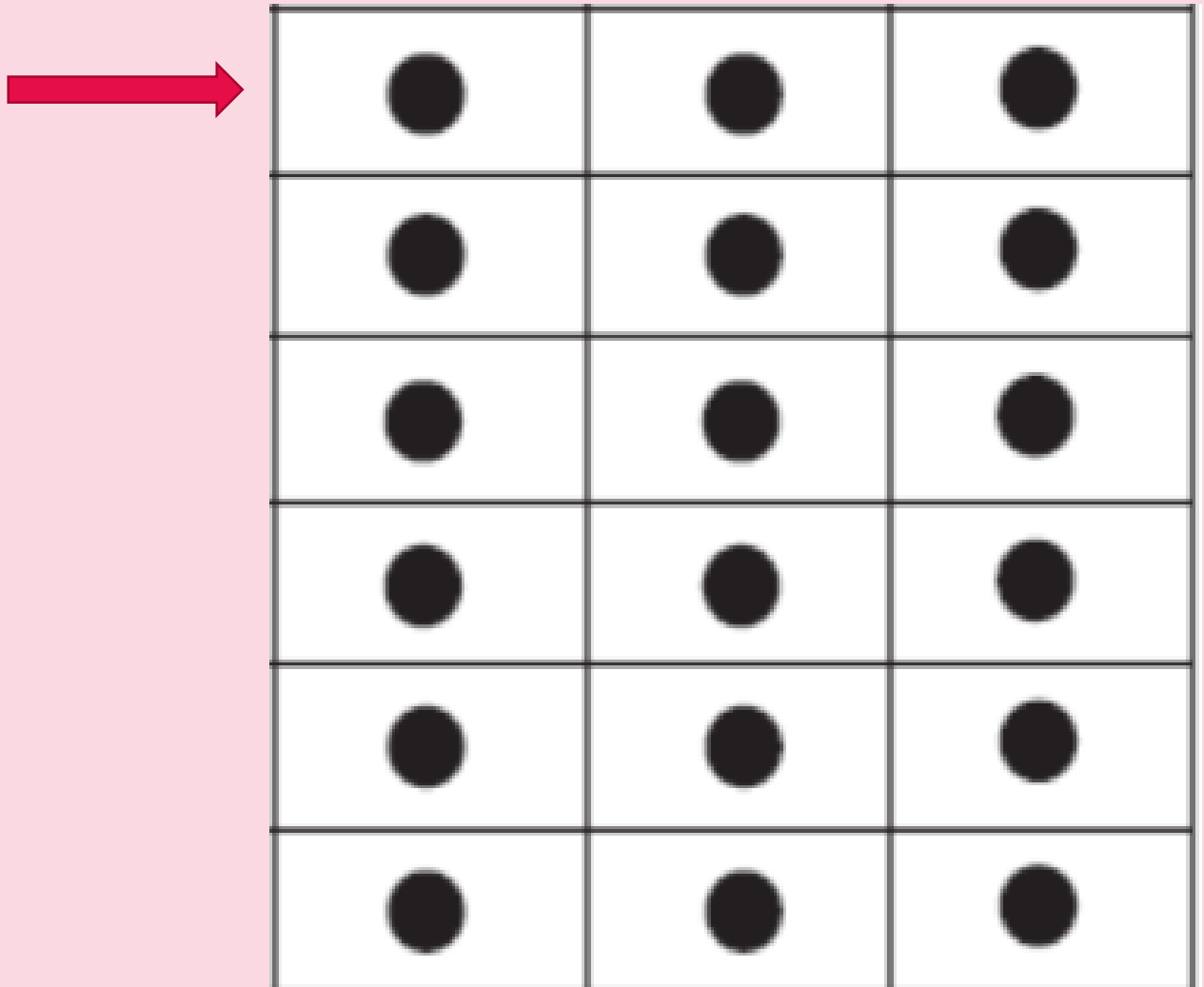
Be ready for a cold call!



New learning

Another practise

Your turn - You will count the rows

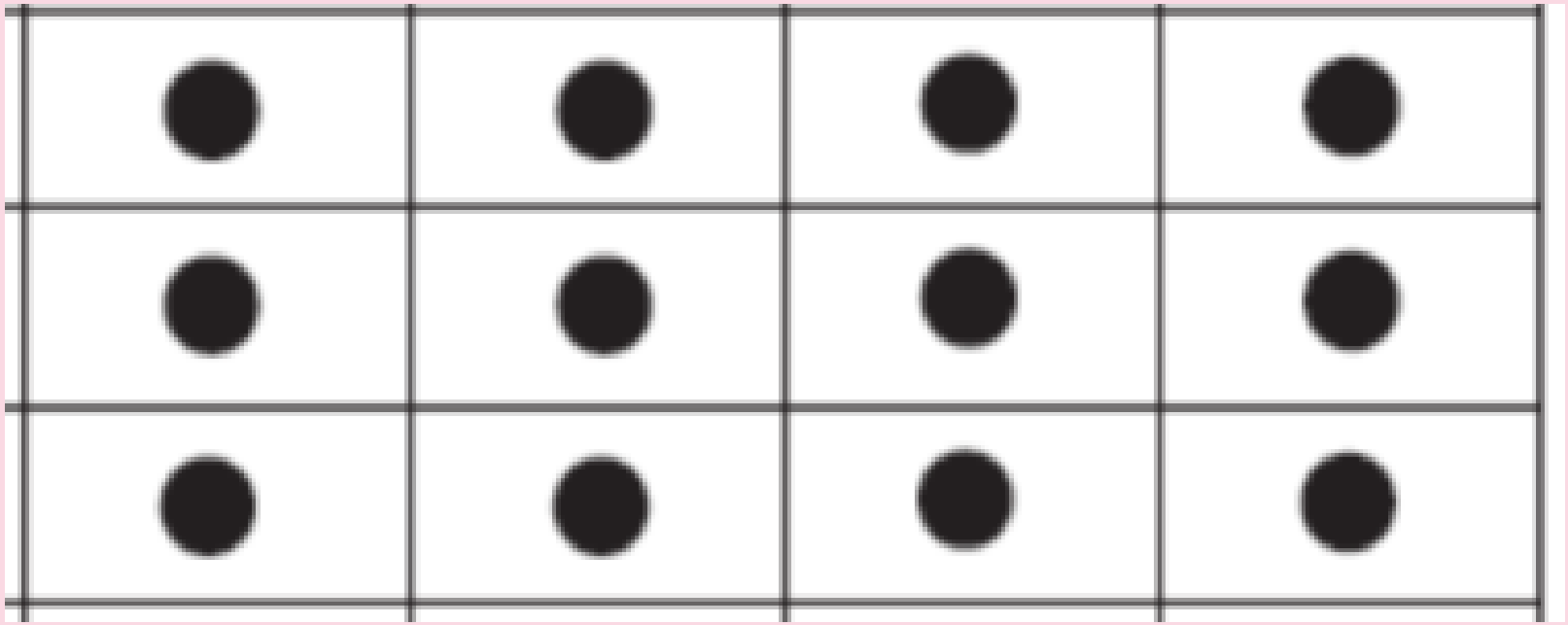


New learning

Let's practise counting using arrays

My turn - First I will count how many dots are in each row

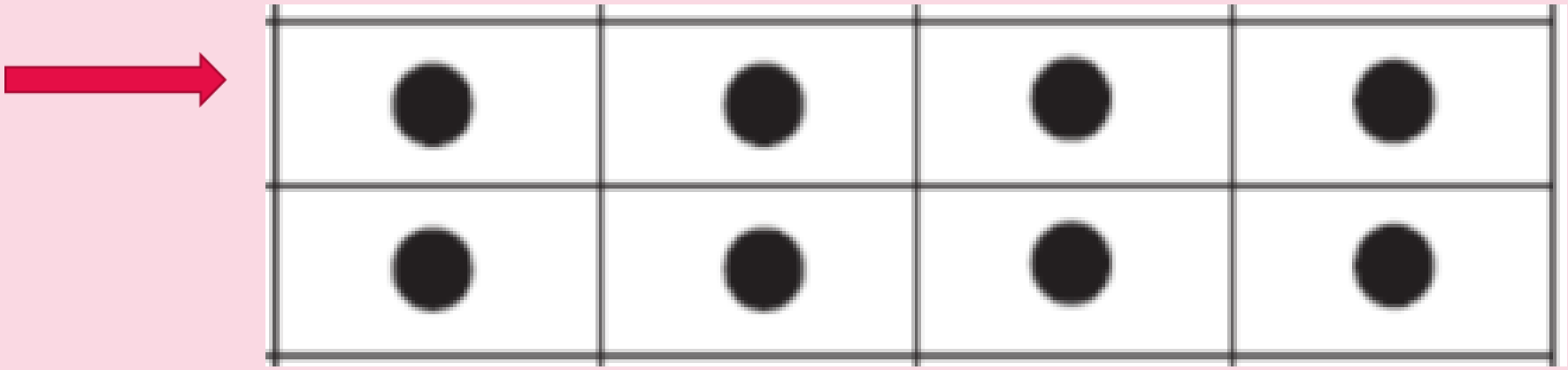
I will count the rows



New learning

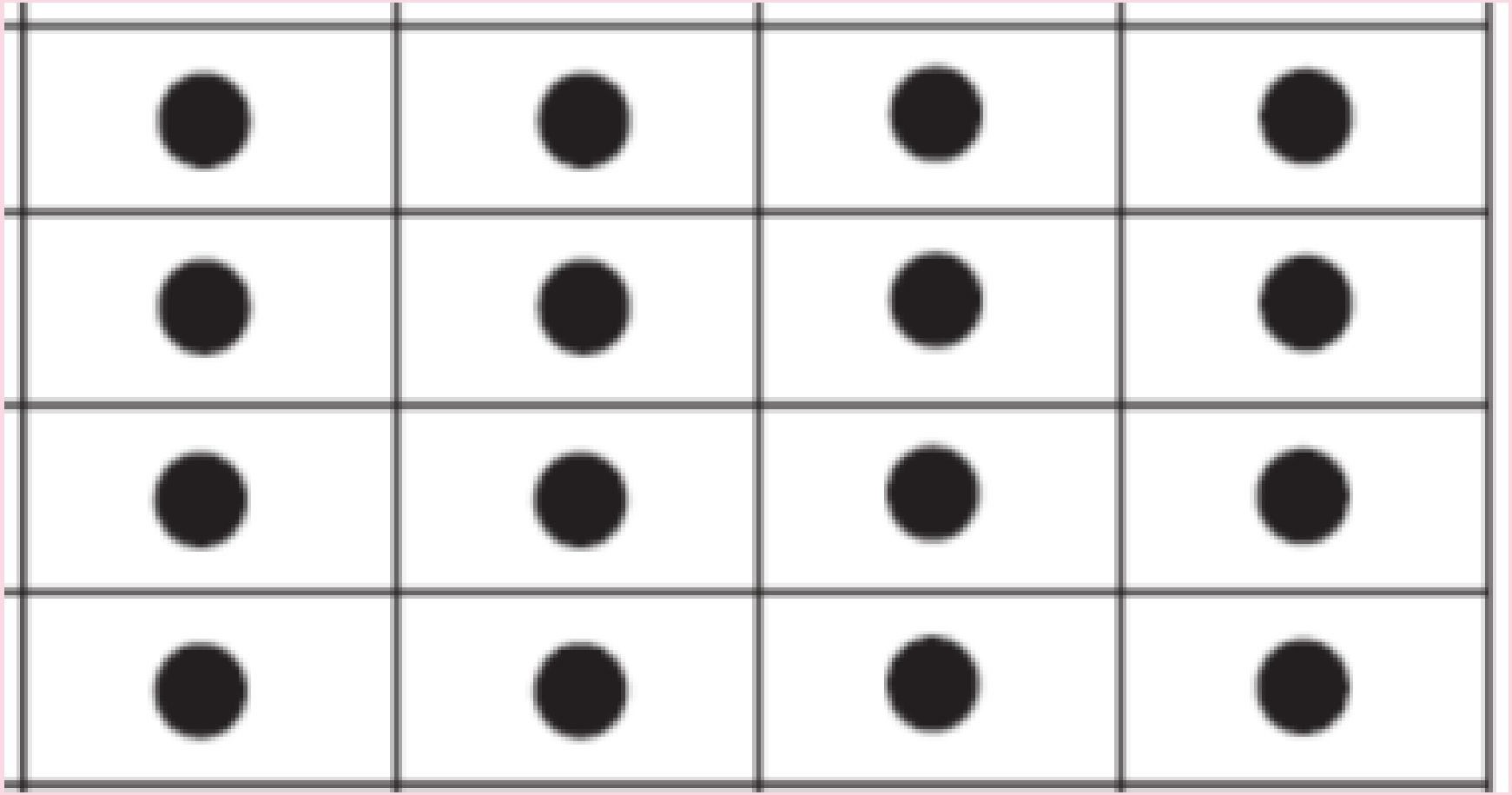
Let's practise counting using arrays

Our turn - We will count the rows



New learning

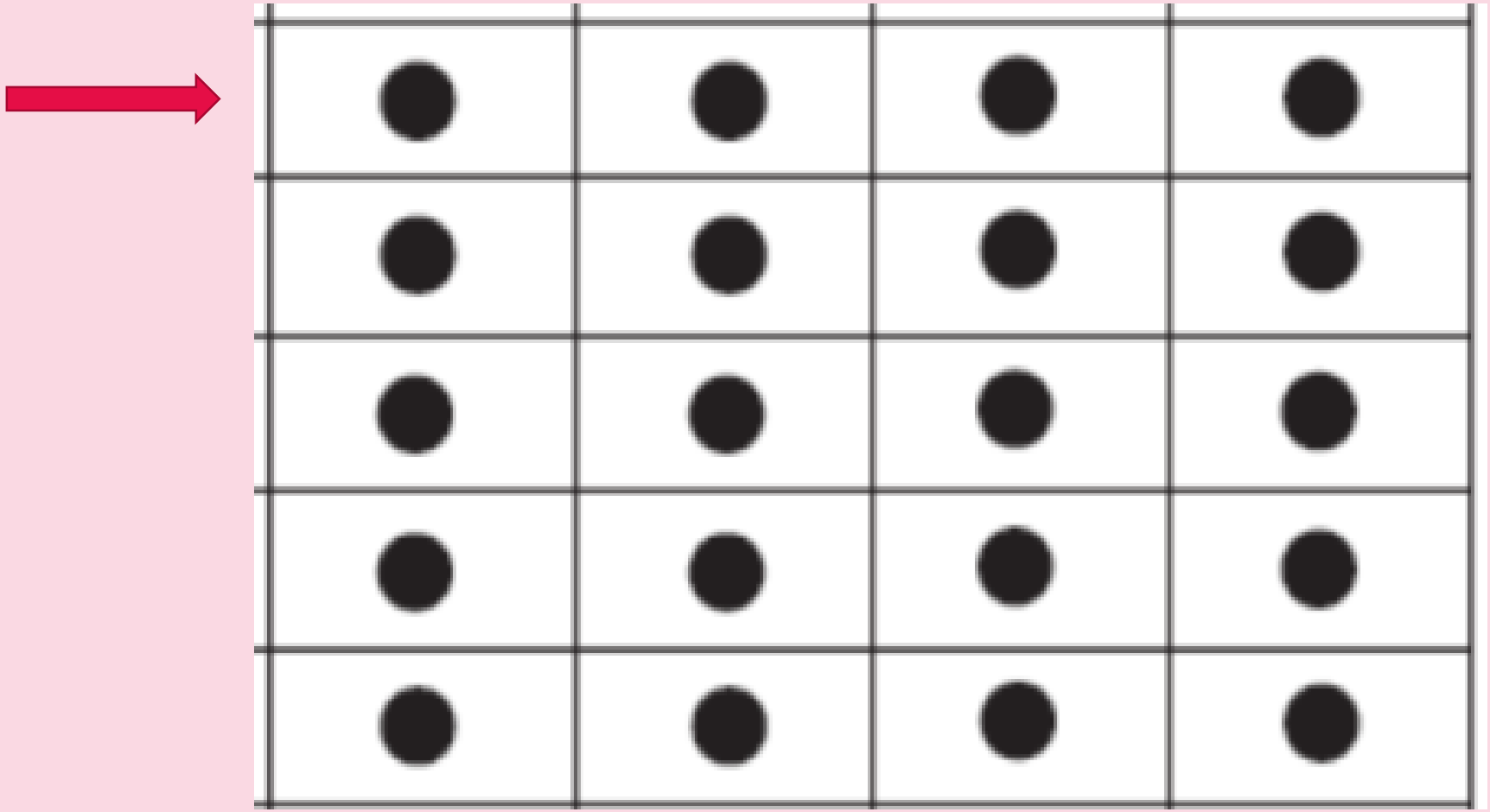
Your turn - You will count the rows and write your answer



New learning

Another practise

Your turn - You will count the rows



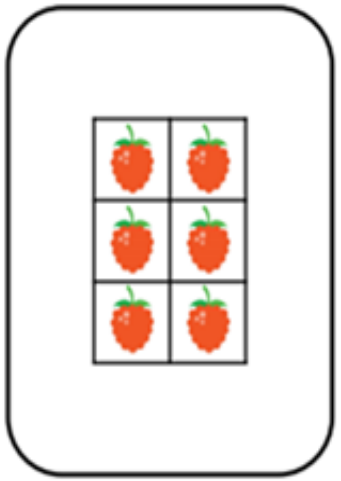
New learning

QUIZ

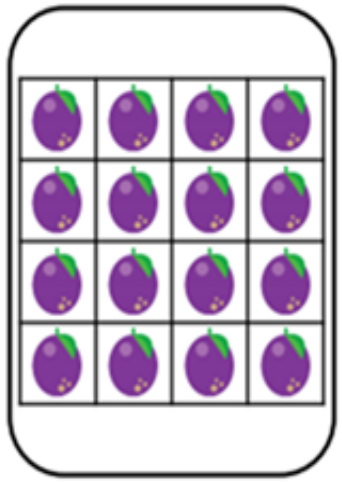
Can you draw an array to show 12?

You must have 12 dots arranged in equal rows and columns

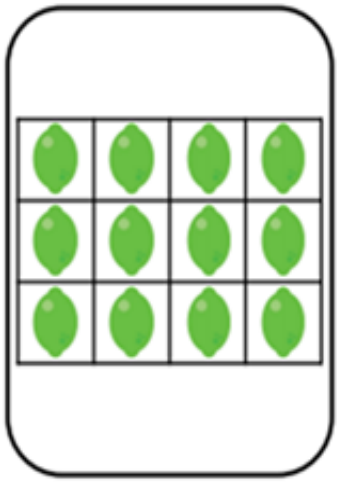
Quiz



B.



C.



_____ rows

_____ columns

☐ strawberries

_____ rows

_____ columns

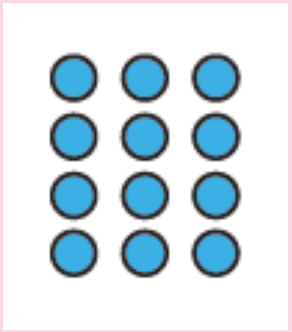
☐ plums

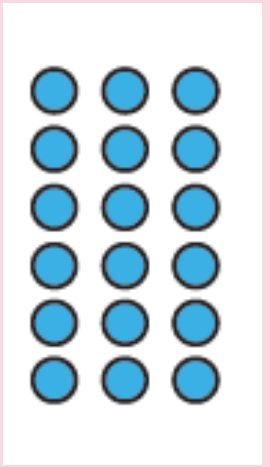
_____ rows

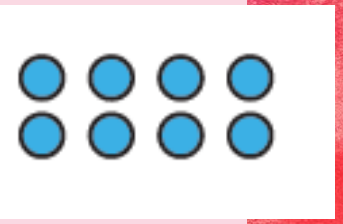
_____ columns

☐ limes

Write a multiplication equation for these arrays







2 groups of **4**

4 groups of **4**

3 groups of **4**

5 groups of **4**

What multiplication equation could you write for each array?

Feedback

Was there anything you found tricky?

Was there anything you thought you did well with?

How can we help you?

Plenary

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Ark Curriculum+

Wednesday 13th January 2021
REMOTE LEARNING

Year 3 Unit 6: Multiplication and division

Lesson 6 arrays of 3 and 4

Mathematics
Mastery

DO NOW

Shadow array game

Do now

Key learning:

I will know how to describe and interpret arrays for the multiplication tables of three and four

Star Words

array

multiply

divide

groups

part

whole

Review

solve by counting in 3s or drawing groups of 3

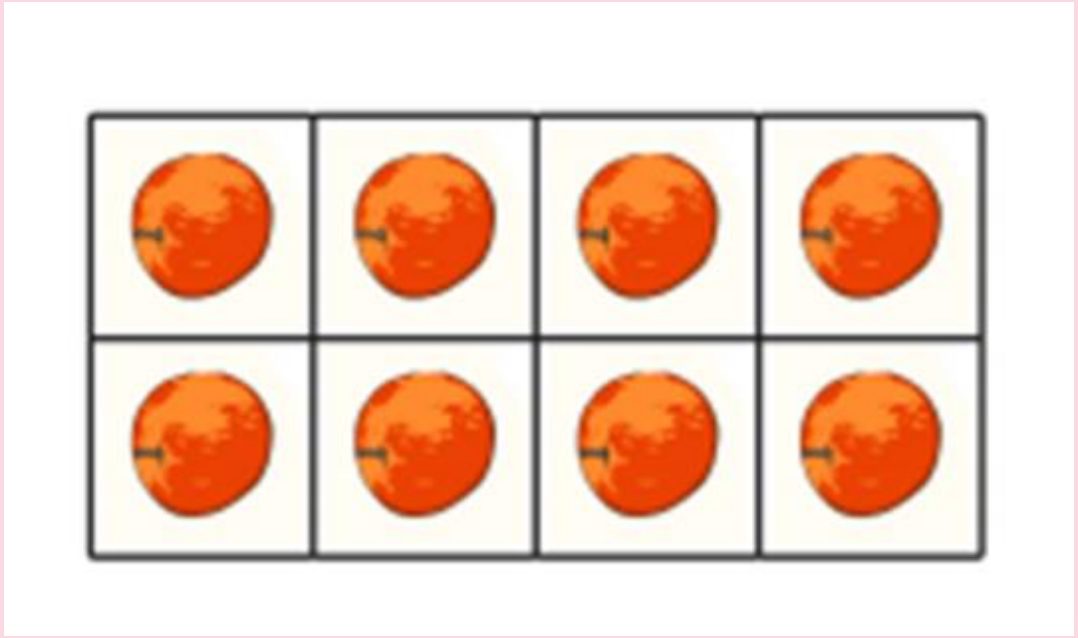
$3 \times 4 =$

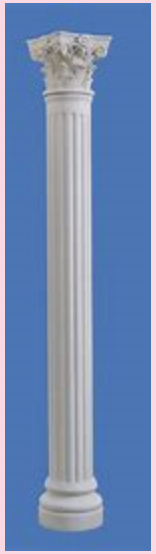
$4 \times 4 =$

$3 \times 5 =$

$4 \times 5 =$

New learning



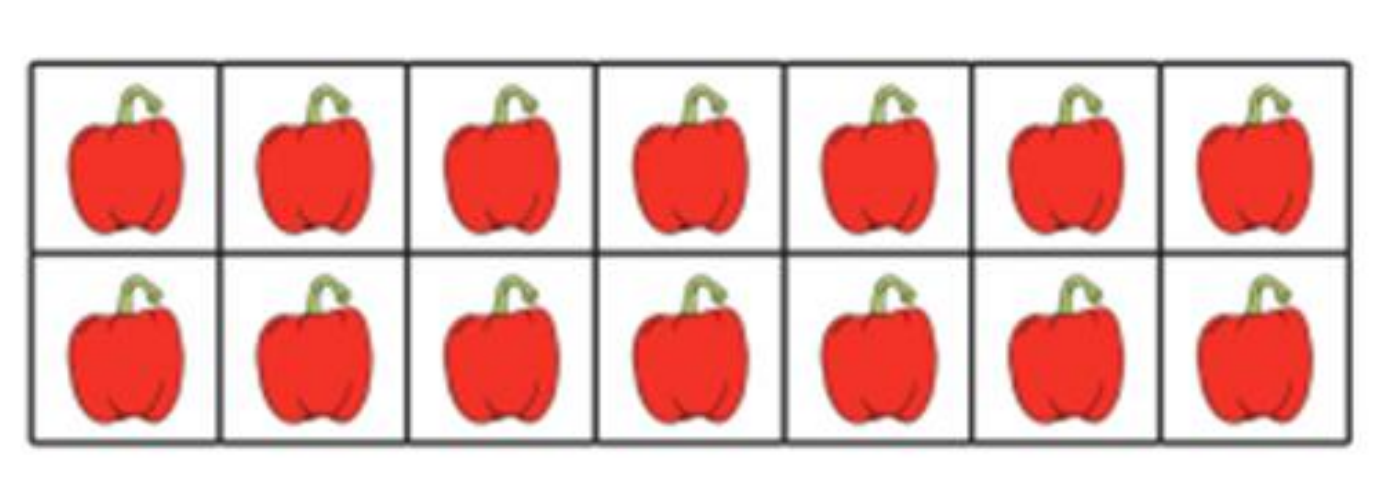


Columns go up and down.

Rows go side to side.

Arrays, rows and columns

I will work out how to write a calculation for this array.

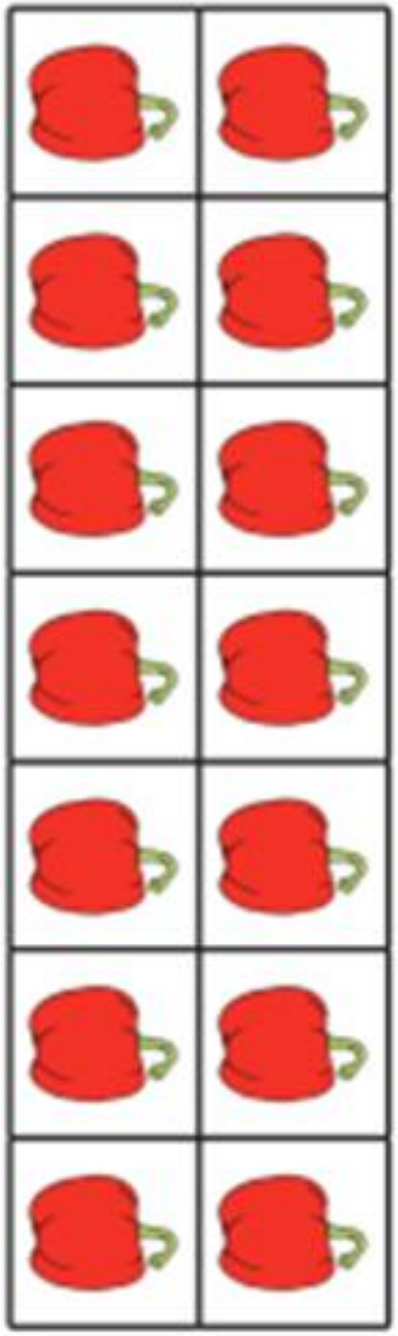


□ x □ = □

New learning

Arrays, rows and columns

What if I turn the picture round?

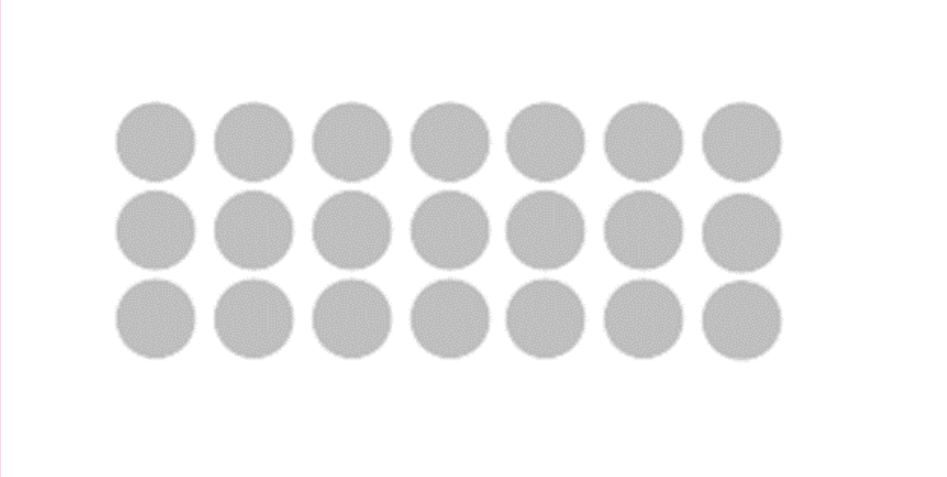


How has the calculation changed?
Has it changed the product (the answer)?

New learning

Our turn

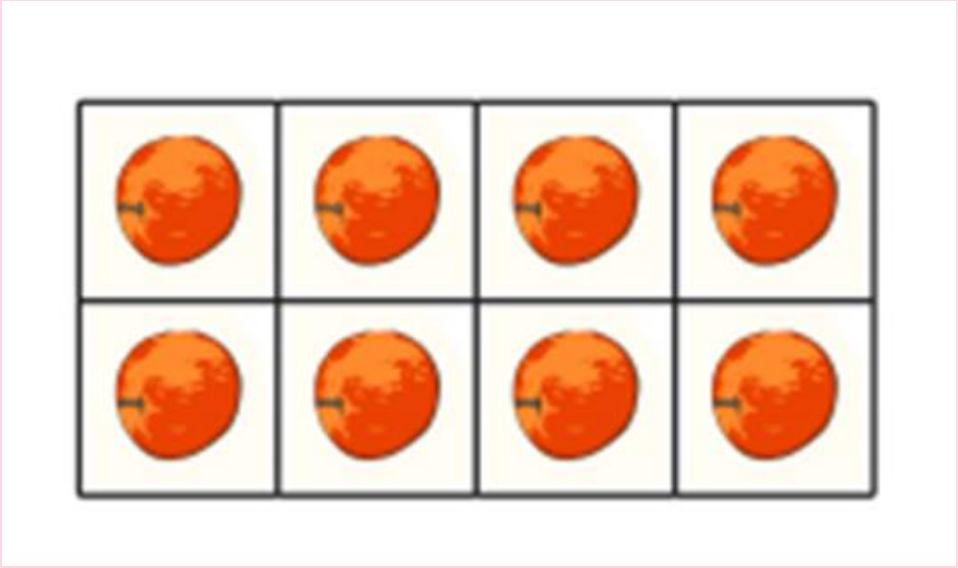
we will work out how to write a calculation for this array.



New learning

Your turn

Write a calculation for this array.



New learning

Another practise

Write a calculation for this array.

New learning

Challenge

$4 \times 1 = \square$	$3 \times 10 = \square$
$4 \times 2 = \square$	$3 \times 5 = \square$

Look at these calculations.

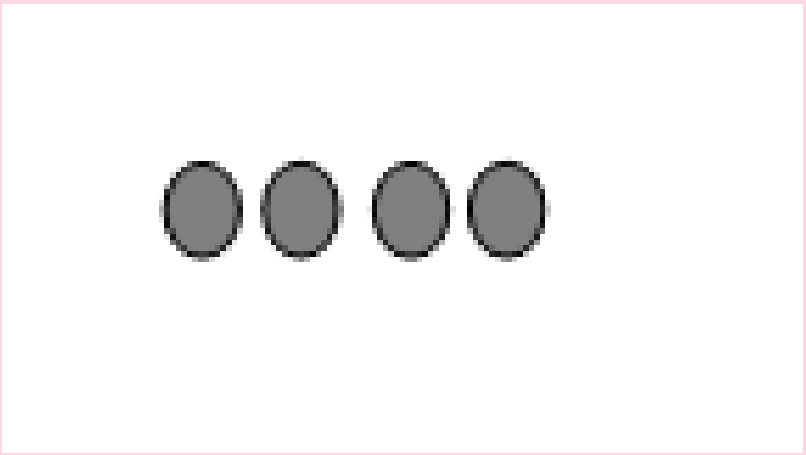
I will show you an array.

You must choose the multiplication calculation from my list to match the picture.

Write it down.

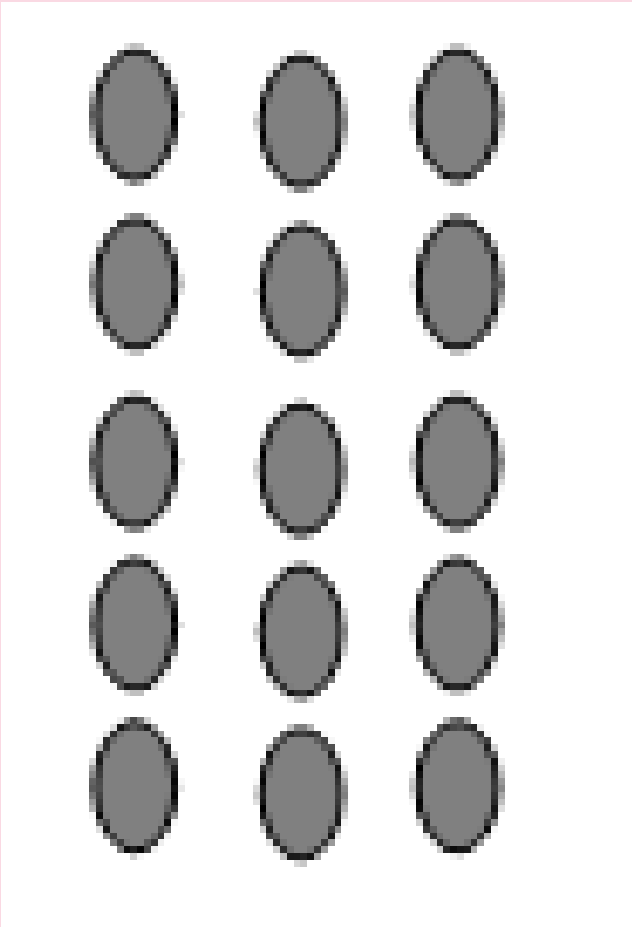
Be ready for a cold call!

Challenge



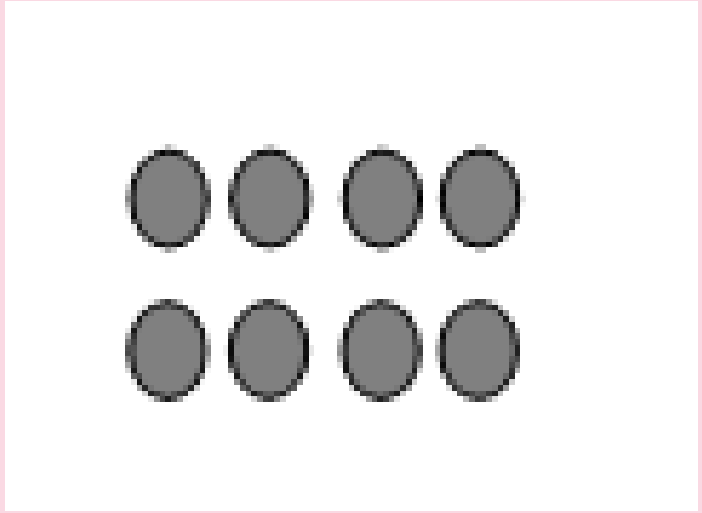
$4 \times 1 =$ ☐	$3 \times 10 =$ ☐
$4 \times 2 =$ ☐	$3 \times 5 =$ ☐

Challenge



$4 \times 1 =$ ☐	$3 \times 10 =$ ☐
$4 \times 2 =$ ☐	$3 \times 5 =$ ☐

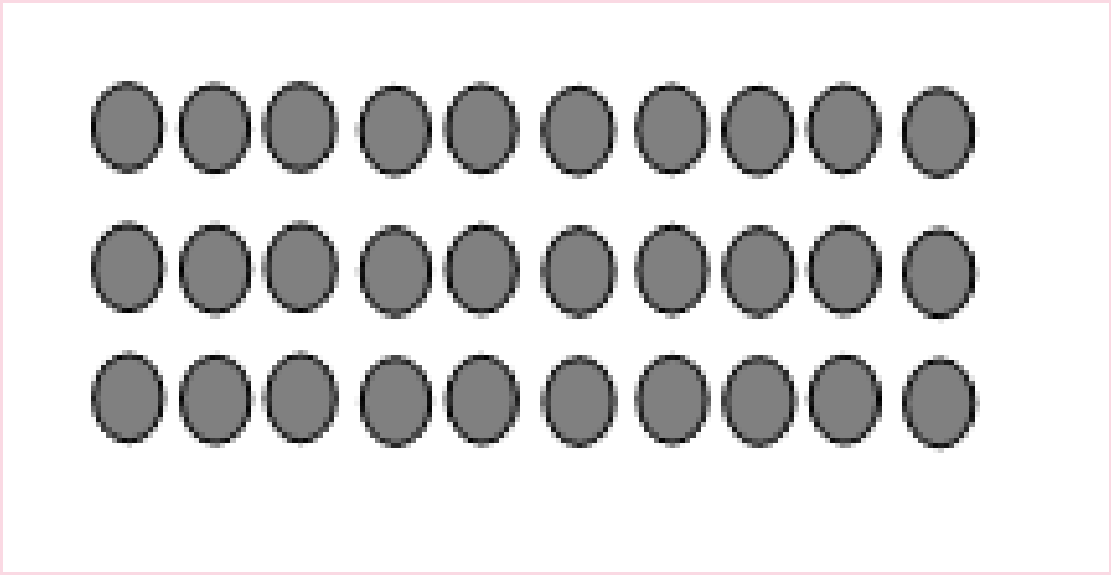
Challenge

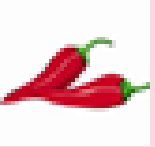


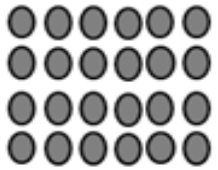
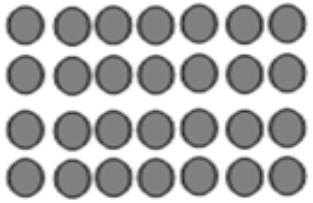
$4 \times 1 =$ ☐	$3 \times 10 =$ ☐
$4 \times 2 =$ ☐	$3 \times 5 =$ ☐

Challenge

$4 \times 1 =$ ☐	$3 \times 10 =$ ☐
$4 \times 2 =$ ☐	$3 \times 5 =$ ☐



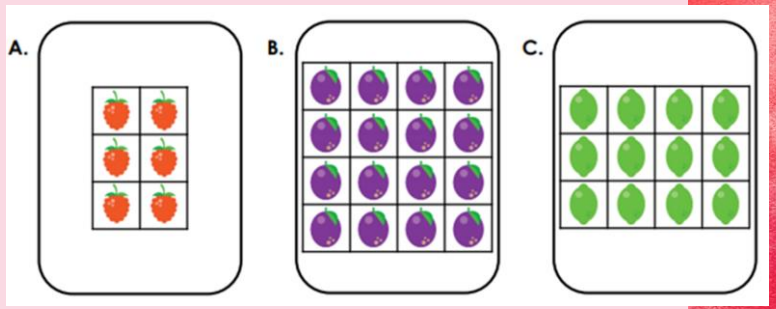


	2 x ___ = ____
	5 x ___ = ____
	
	
	
	

Write both of the calculations for each array

2 x 4 =
4 x 2 =

What could the x calculation be for each array?



Independent task

Feedback

Was there anything you found tricky?

Was there anything you thought you did well with?

How can we help you?

Plenary

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For today's lesson it might be helpful for you to have some small object to use as counters. Anything you can find at home.

Turn your camera and microphone off please

Ark Curriculum+

Thursday 14th January 2021
REMOTE LEARNING

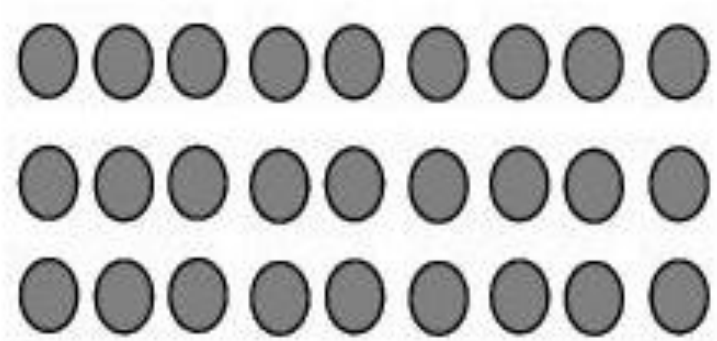
Year 3 Unit 6: Multiplication and division

Lesson 7 division facts for 3x table

Mathematics
Mastery

DO NOW

Which equation matches the array shown below? *

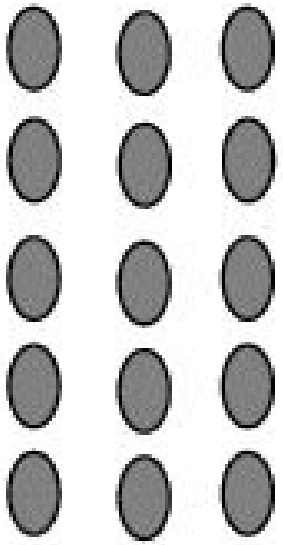


- 3 x 3
- 3 x 10
- 3 x 9

Do now

DO NOW

Which equation matches the array shown below? *



- 5 x 3
- 5 x 4
- 6 x 5

Do now

Key learning:

I will know division facts for the 3x table

Star Words

share

divide

equal

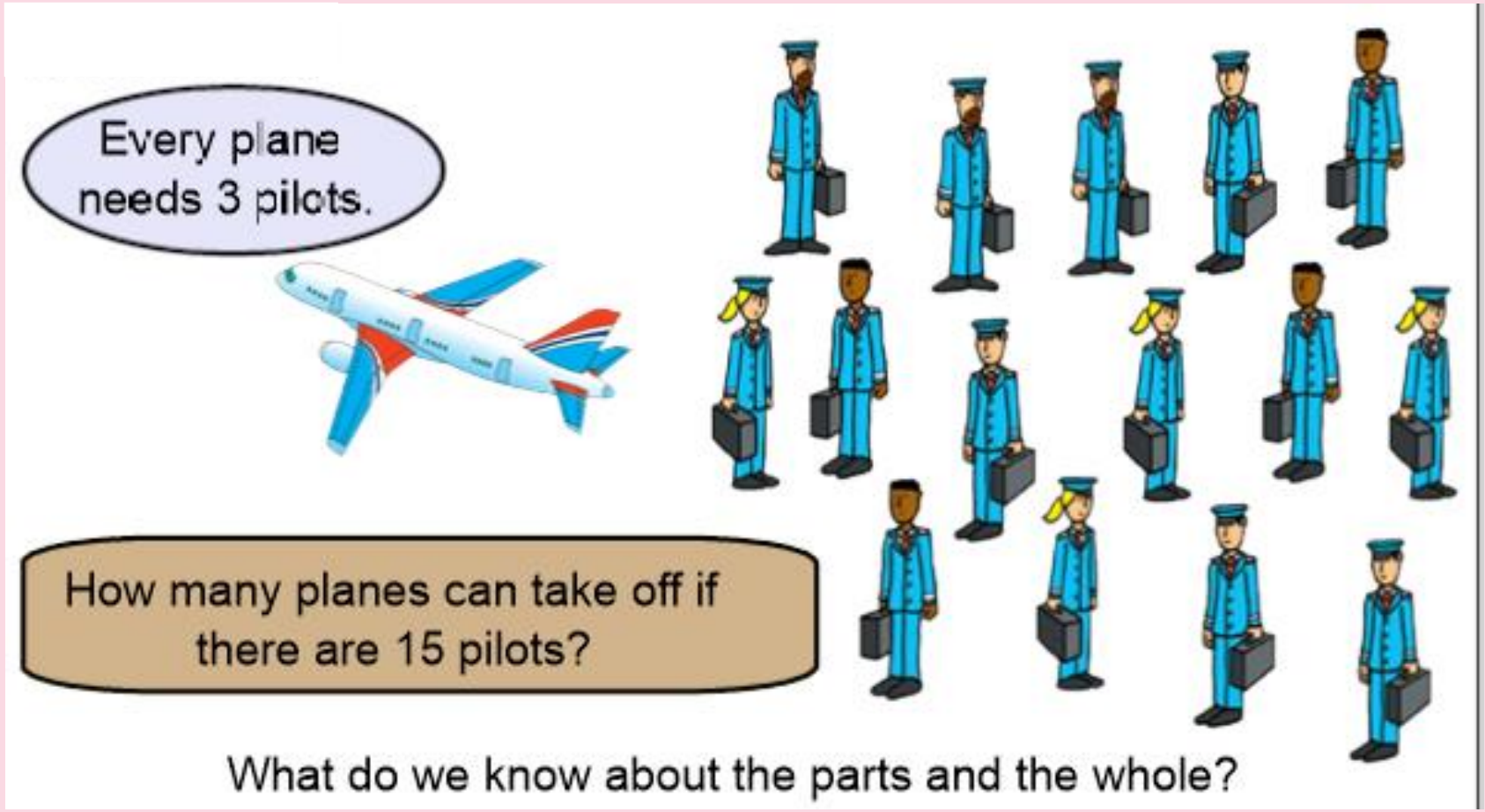
groups

part

whole

÷

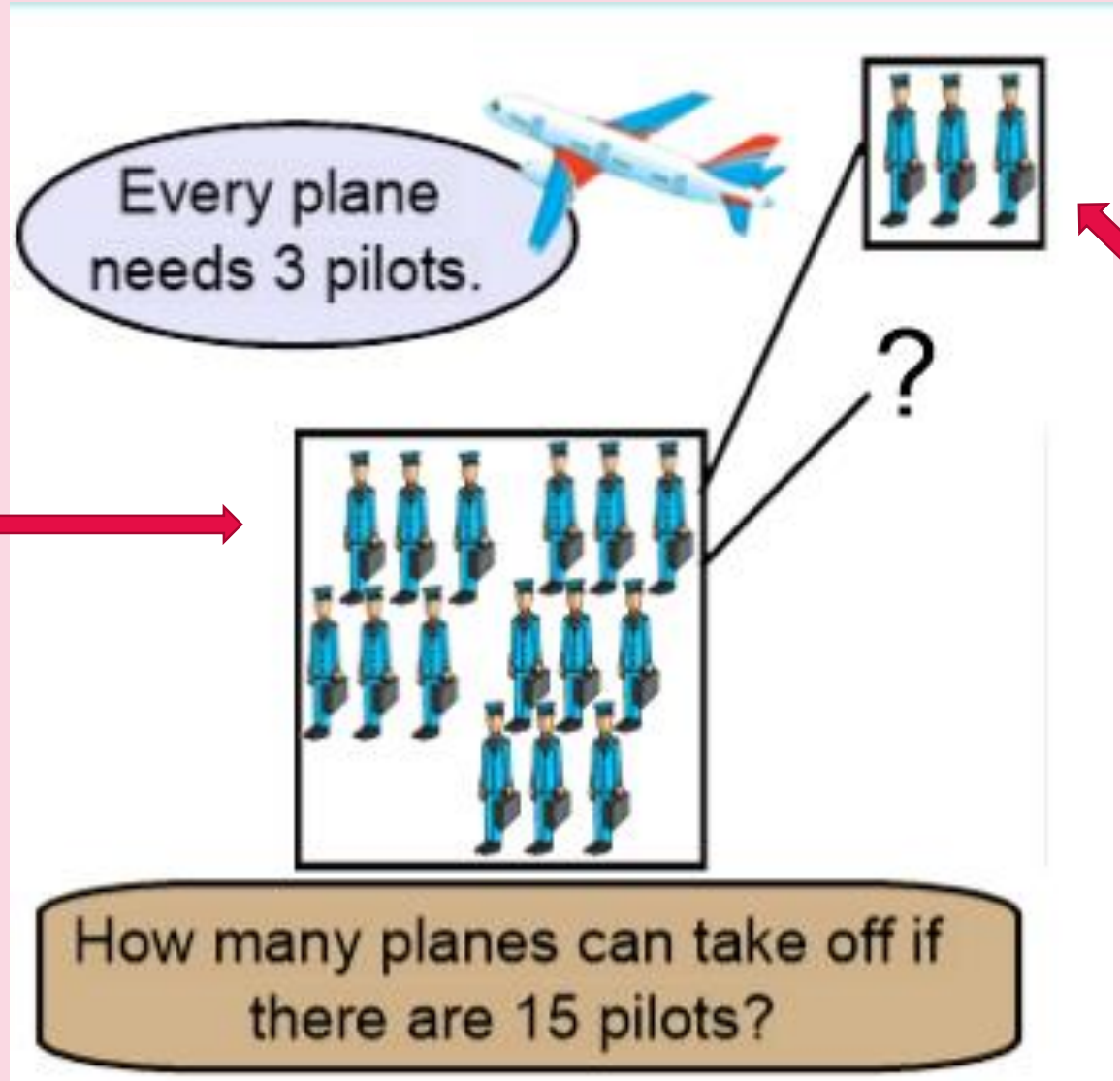
New learning



I know in total we have 15 pilots so that's my whole

I know that the value of each part is 3 but I don't know how many of those parts there are at the moment.

New learning

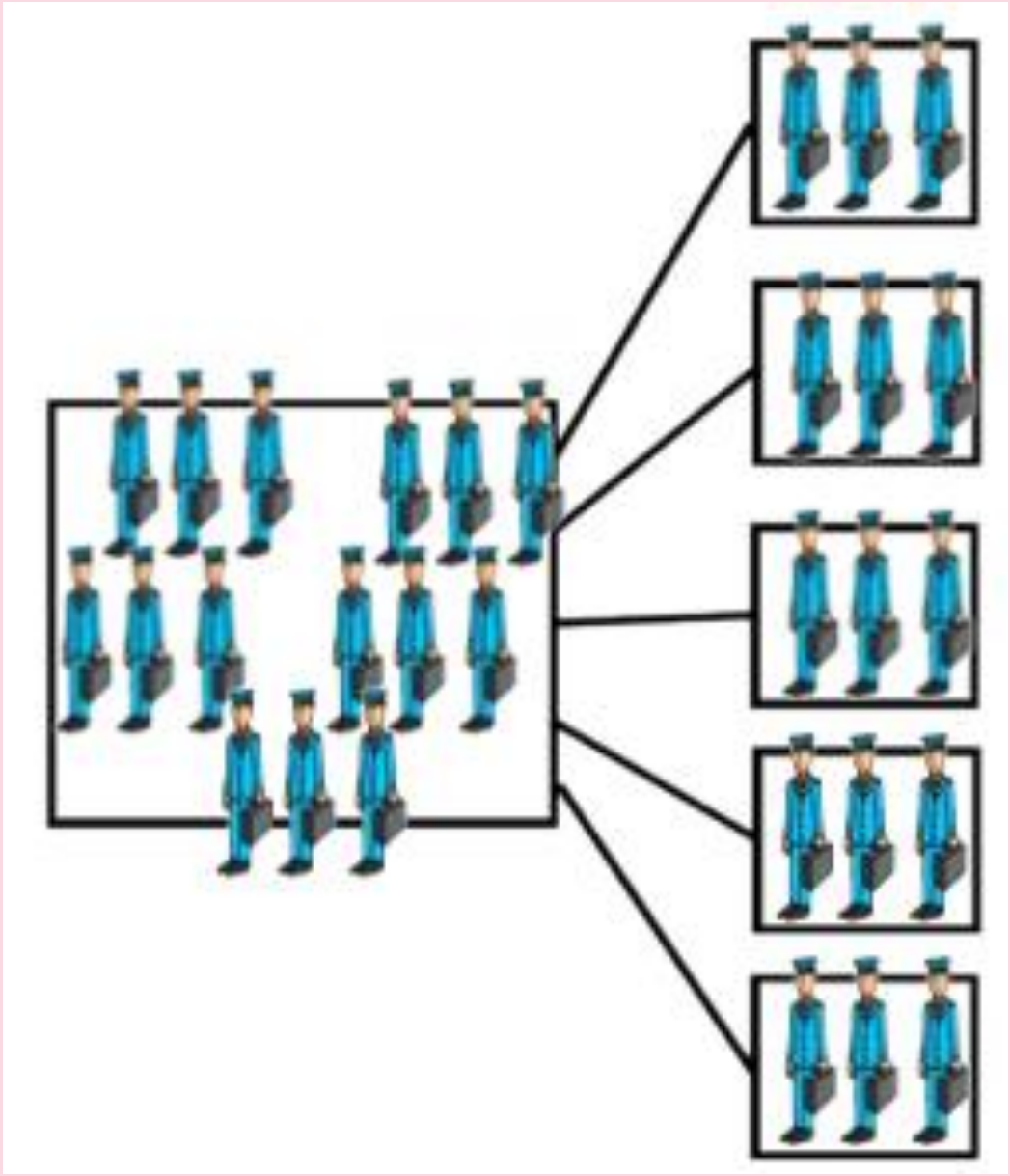


Here are my 15 pilots, that is my whole amount

We know that each part has a value of 3, each plane needs 3 pilots

We don't know how many of those boxes we will need

Let’s use this part whole model to help us



This time we have
lots of boxes.

Let’s count them!

That’s 5 boxes
each containing 3 pilots

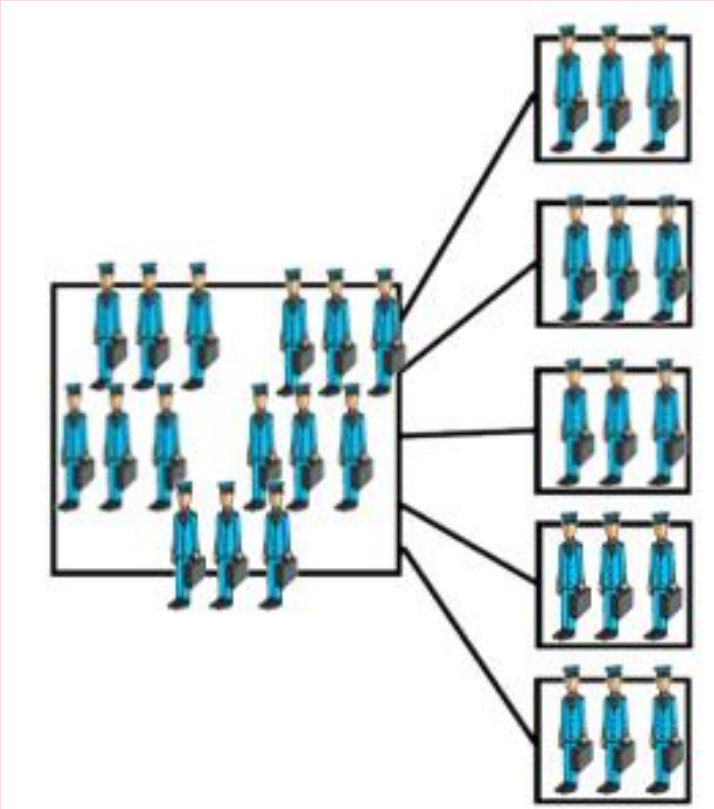
Let’s count in our 3s
to make sure we have
all our 15 pilots.

We had to group them
into 5 groups of 3 and
they are all **equal.**

New learning

Can you think of any equations we could write for this?

2 minutes then be ready for a cold call



$\square \times \square = \square$

Can we write it as a division equation too?

$\square \div \square = \square$

New learning

Let's try another together

There are 12 eggs and 3 nests.

Each nest has an equal amount of eggs.

How many eggs are in each nest?

What do we know about the whole and the parts?

1 minute to think of your answer.

That's right!

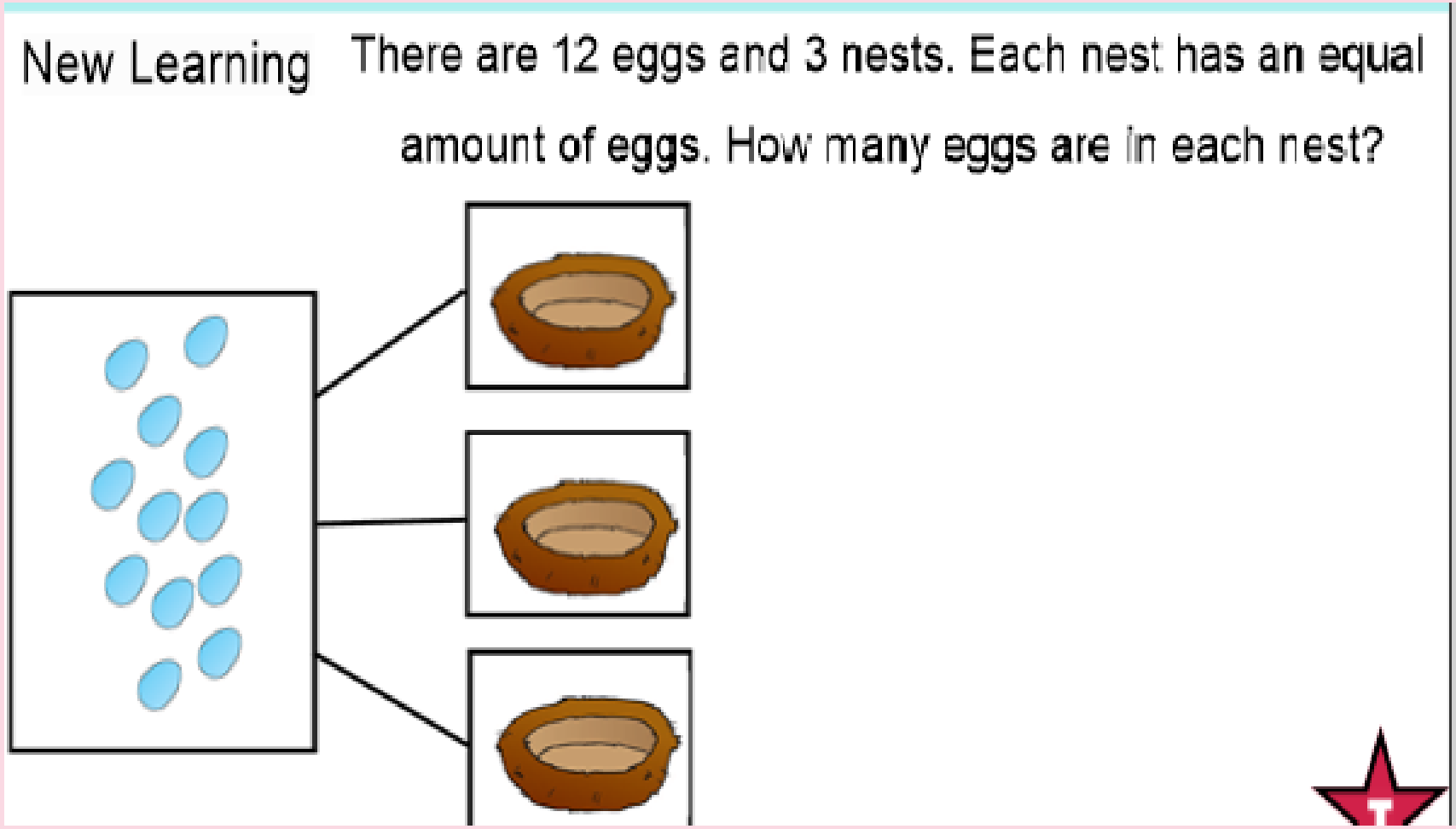
We have 12 eggs that's the whole.
We have three parts, because those are the nests.

Now we need to work out the value of each part, how many eggs will go in each of our nests?

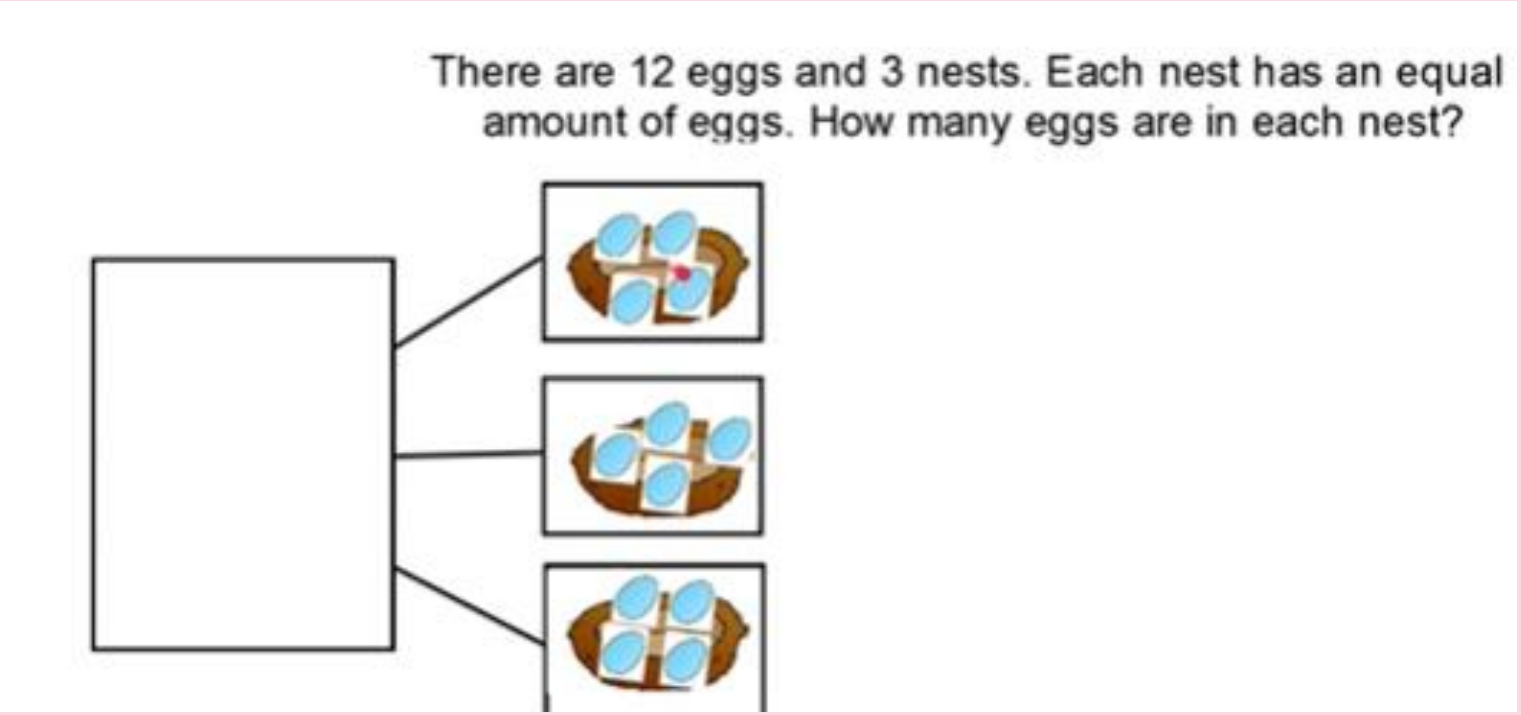
New learning

Use the part whole model to have a go at working out how many eggs will go in each nest.

New Learning



We have split them equally



So I could write this as a multiplication equation

4 x 3 = 12

I could also write this as a division calculation.

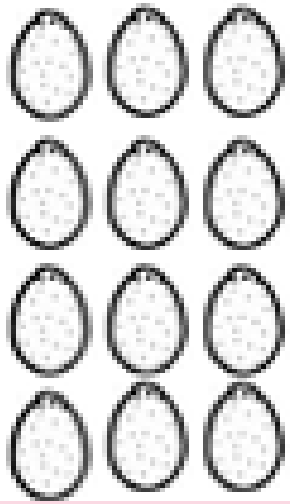
Can you have a try?

□ ÷ □ = □

New learning

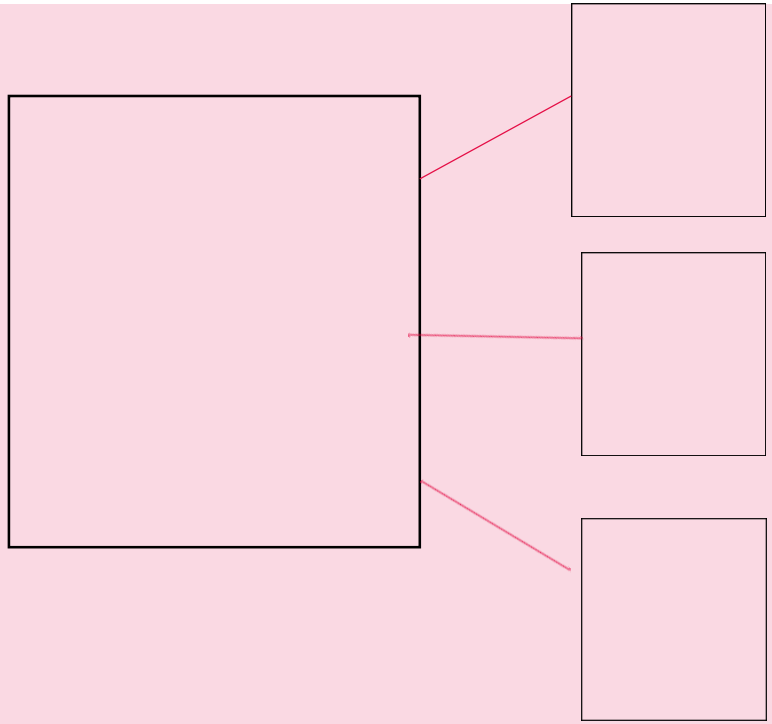
My turn

There are 12 lemons. Divide them into 3 equal groups.



What division equation can you say?

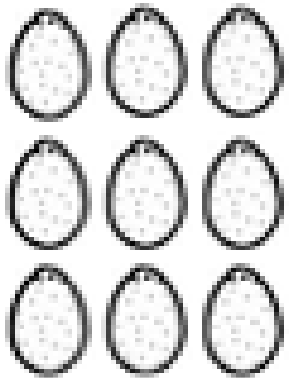
What other equations can you say?



□ ÷ □ = □

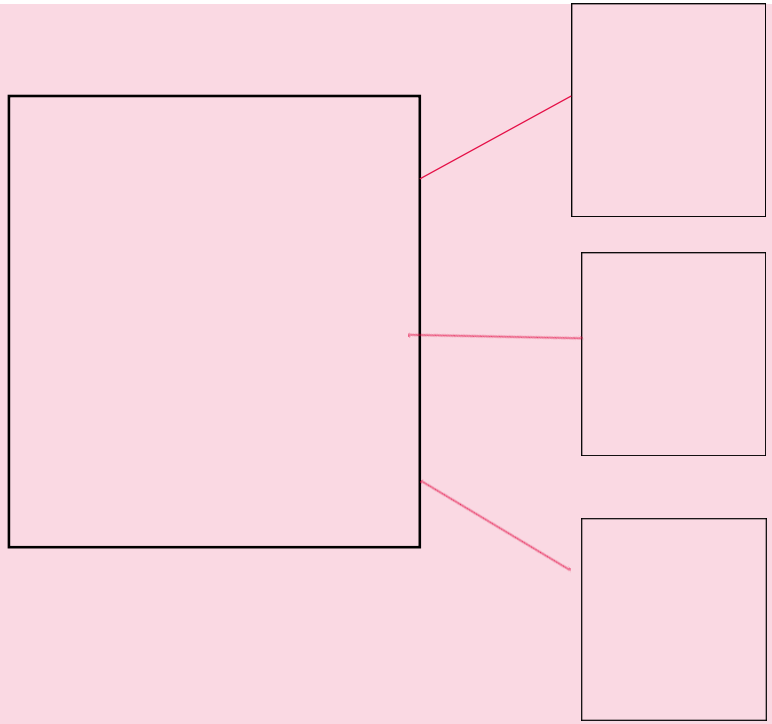
Our turn

There are 9 lemons. Divide them into 3 equal groups.



What division equation can you say?

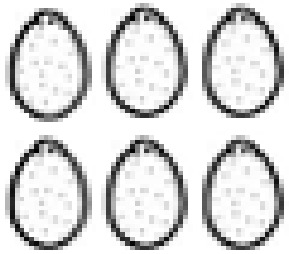
What other equations can you say?



□ ÷ □ = □

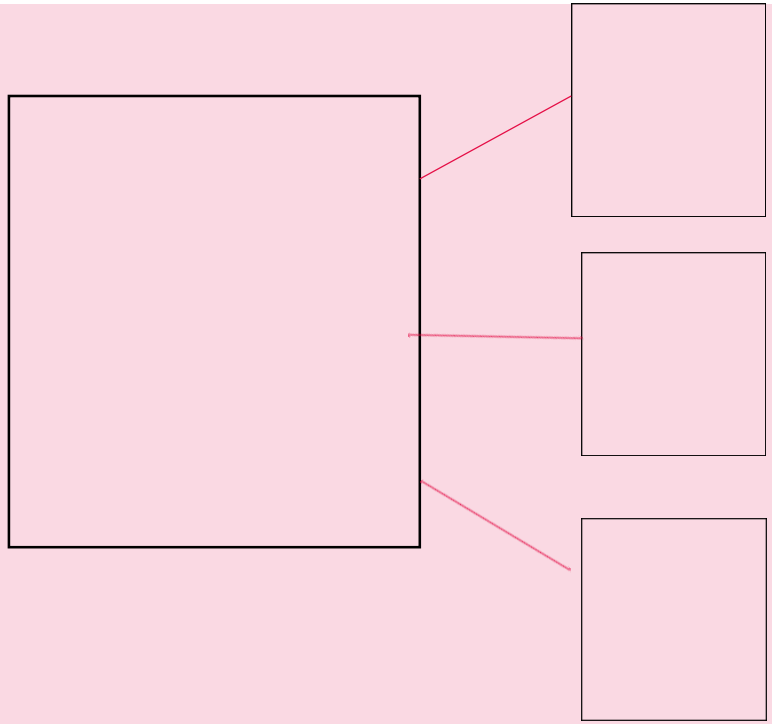
Your turn

There are 6 lemons. Divide them into 3 equal groups.



What division equation can you say?

What other equations can you say?



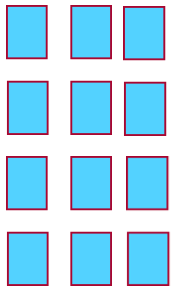
There are 15 lemons. Divide them into 3 equal groups.

What division equation can you say?

There are 9 bottles. Divide them into 3 equal groups.

What division equation can you say?

There are 12 stamps Divide them into 3 equal groups.



What division equation can you say?

Can you write a multiplication equation to match your pictures too?

There are 21 slices of cake. Divide them into groups of 3.

What division equation can you say?

What other equations can you say?

Feedback

Was there anything you found tricky?

Was there anything you thought you did well with?

How can we help you?

Plenary

Welcome to Year 3 live maths lesson

The session will begin at 11.05

For today's lesson it might be helpful for you to have some small object to use as counters. Anything you can find at home.

Turn your camera and microphone off please

Ark Curriculum+

Friday 15th January 2021
REMOTE LEARNING

Year 3 Unit 6: Multiplication and division

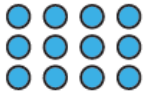
Lesson 8 division facts for 4x table

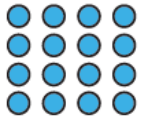
Mathematics
Mastery

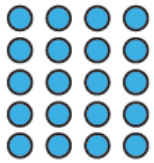
DO NOW write down your answer

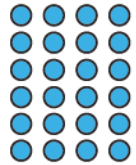
1 × 4 

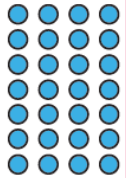
2 × 4 

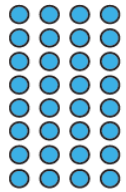
3 × 4 

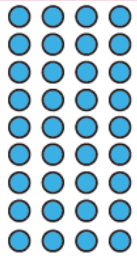
4 × 4 

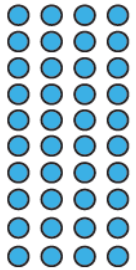
5 × 4 

6 × 4 

7 × 4 

8 × 4 

9 × 4 

10 × 4 

Do now

Key learning:

I will know division facts for the 4x table

Star Words

share

divide

equal

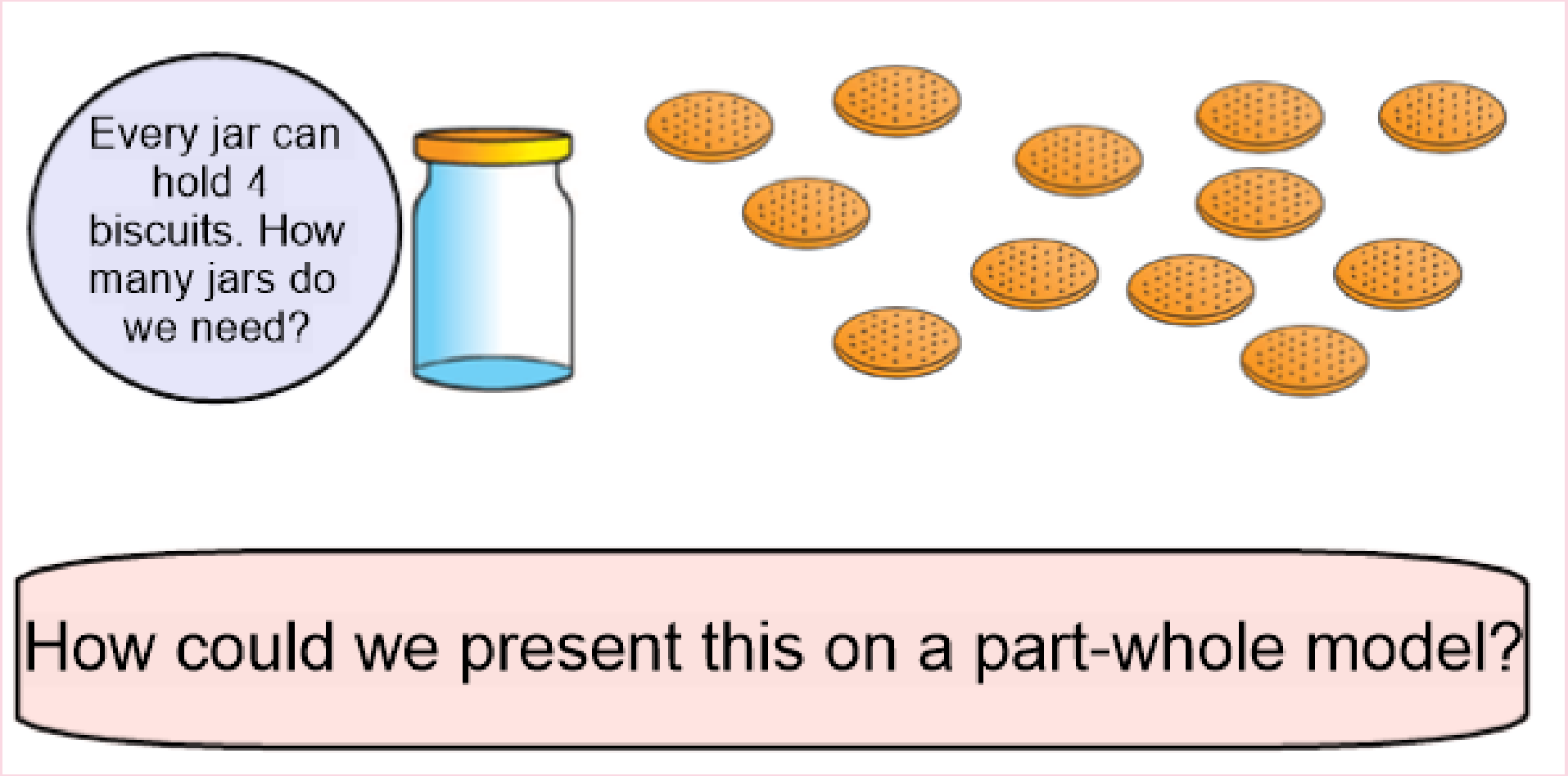
groups

part

whole

÷

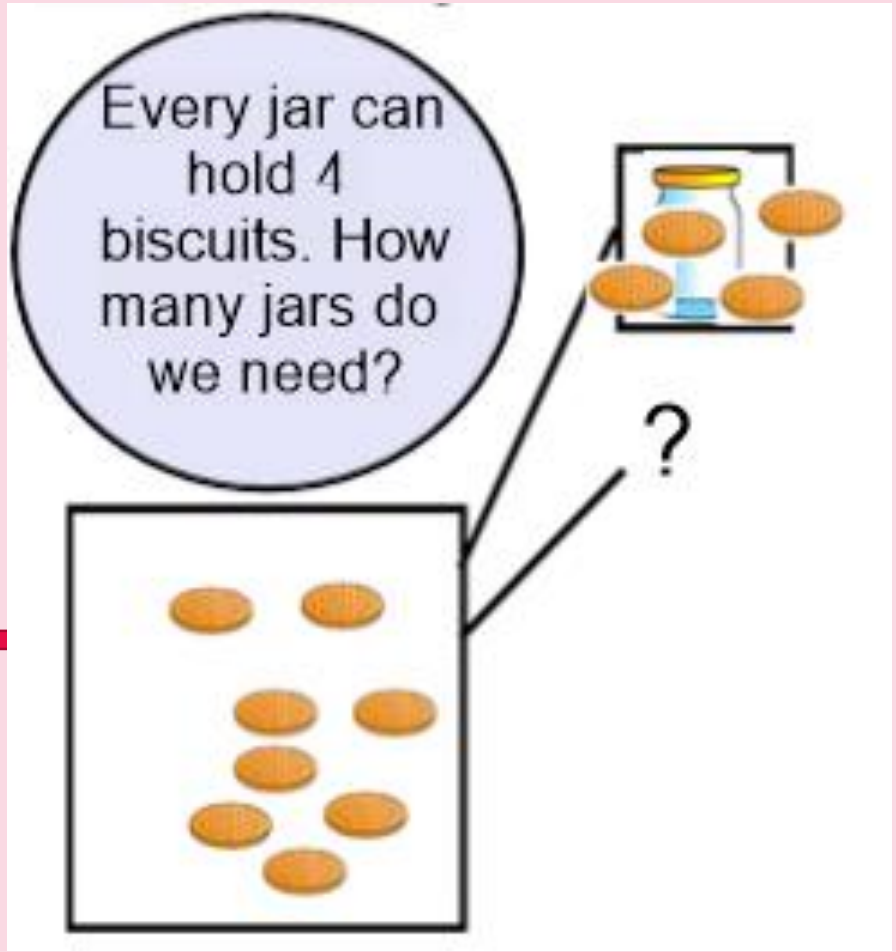
New learning



I know in total we have 12 biscuits so that's my whole

I know that the value of each part is 4 but I don't know how many of those parts there are at the moment.

New learning

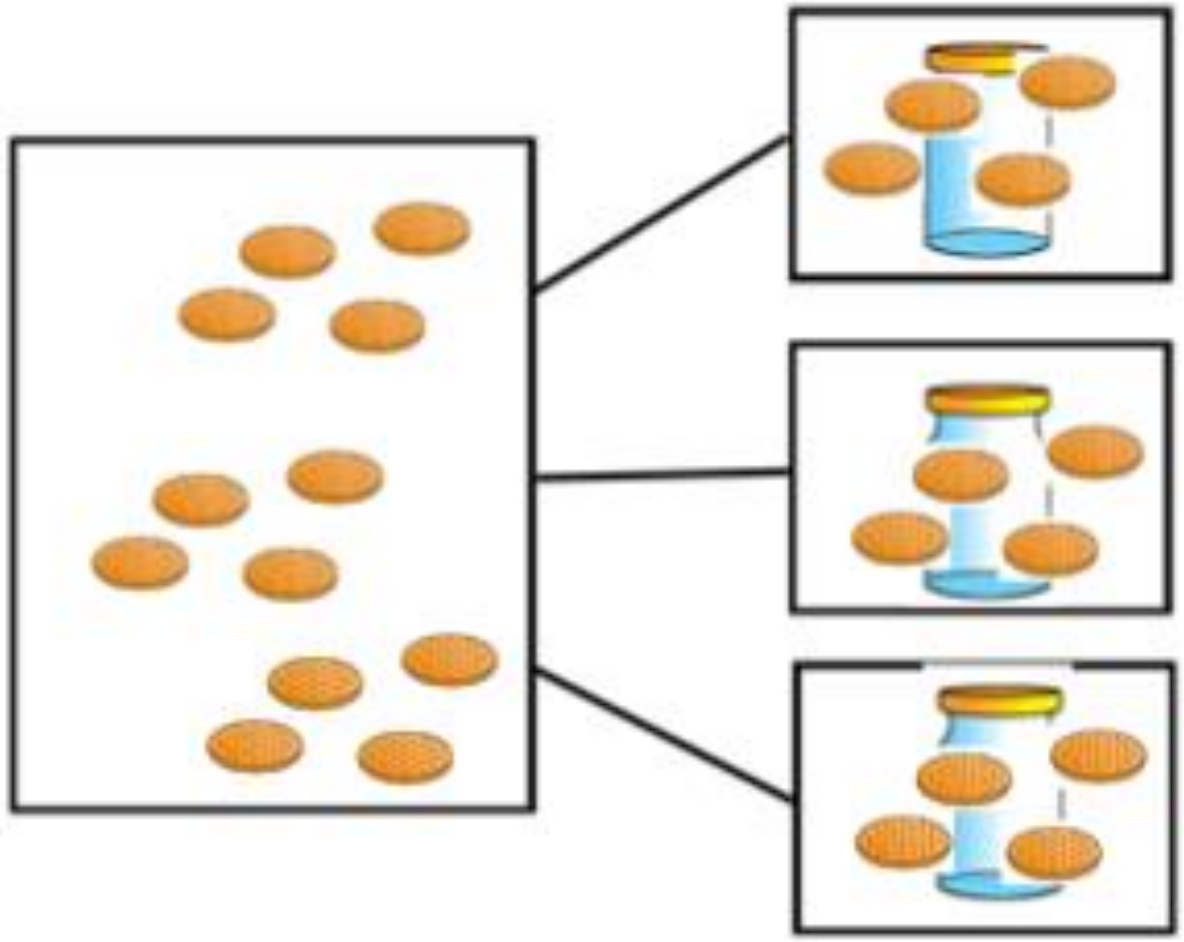


Here are my 12 biscuits- that is my whole amount

We know that each part has a value of 4, each jar needs 4 biscuits

We don’t know how many of those boxes we will need

Let’s use this part whole model to help us



This time we have
lots of boxes.

Let’s count them!

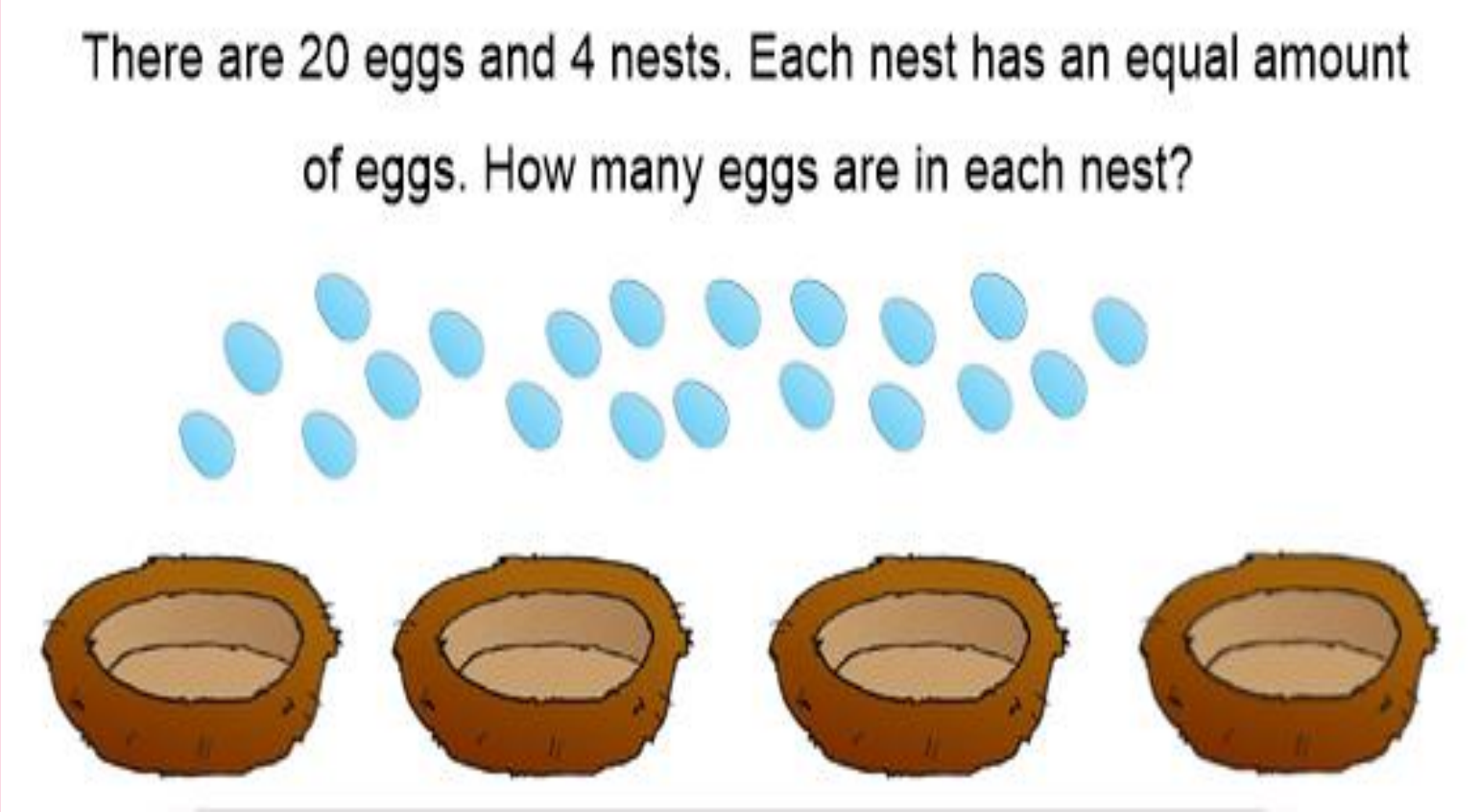
That’s 3 boxes
each containing 4 biscuits

Let’s count in our 4s
to make sure we have
all our 12 biscuits.

We had to group them
into 3 groups of 4 and
they are all **equal.**

New learning

Let's try another together



What do we know about the whole and the parts?

1 minute to think of your answer.

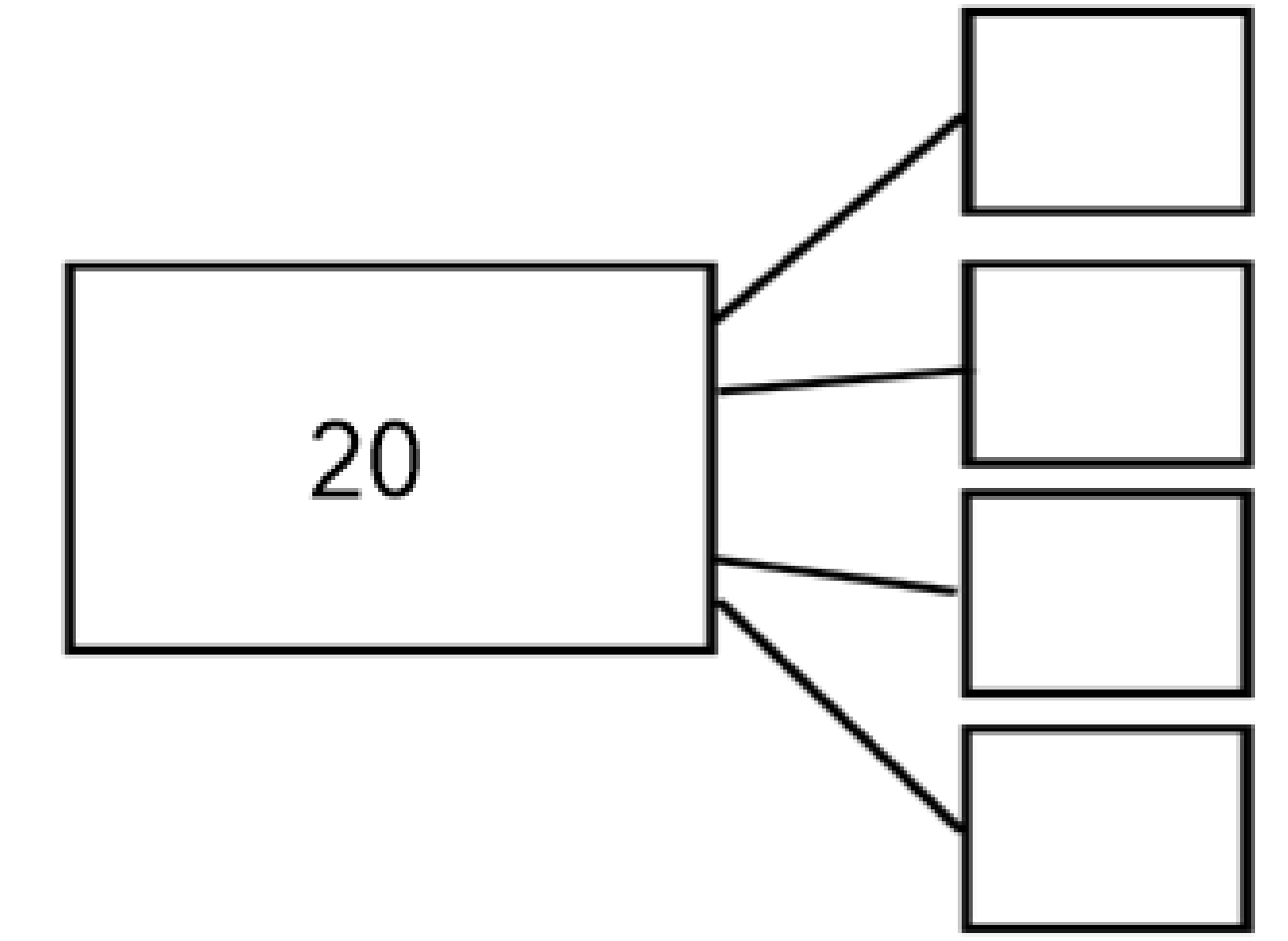
That's right!

We have 20 eggs that's the whole.
We have 4 parts, because those are the nests.

Now we need to work out the value of each part, how many eggs will go in each of our nests?

New learning

Use the part whole model to have a go at working out how many eggs will go in each nest.



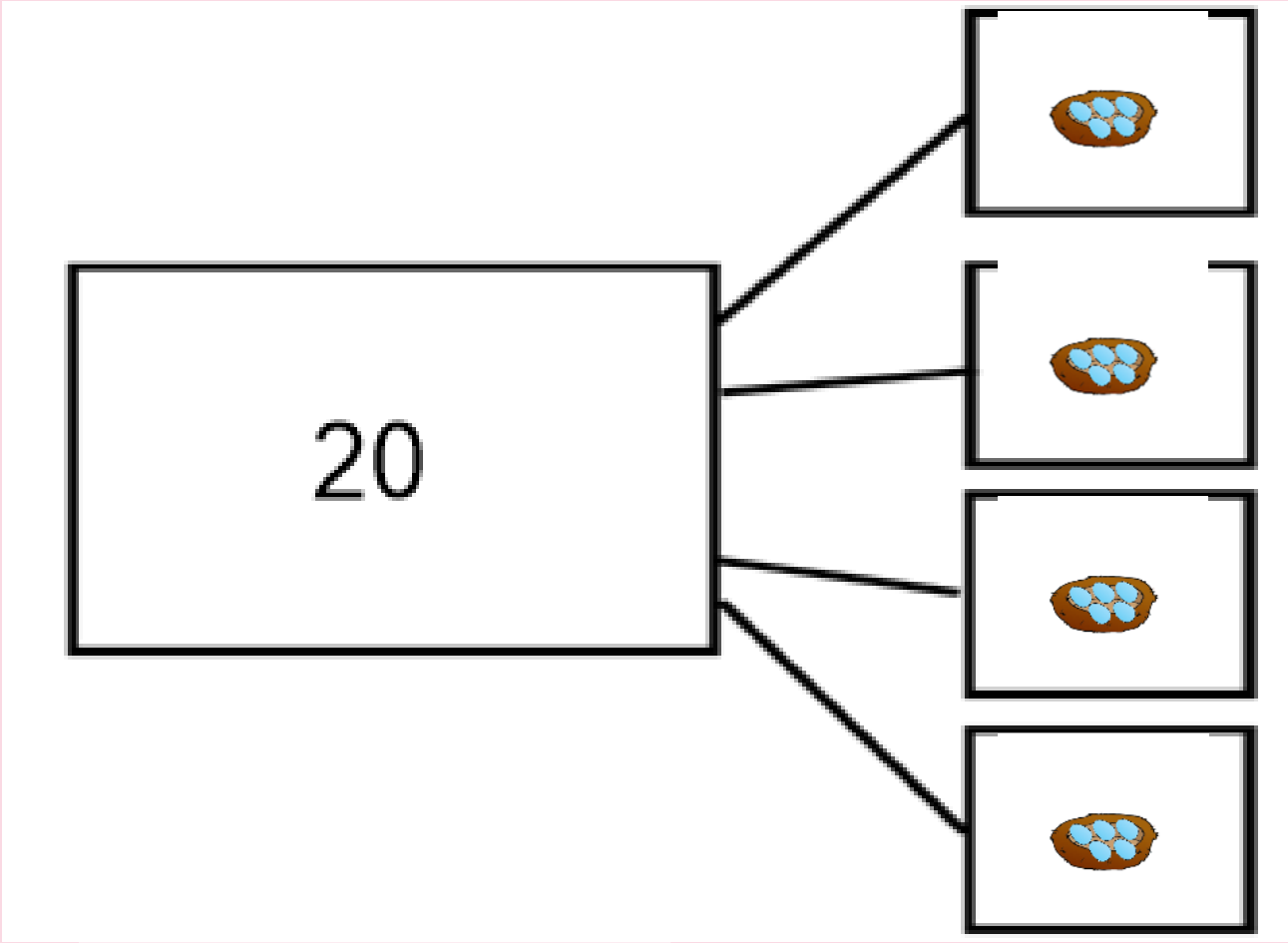
New learning

If you have some objects to use, count out 20 and use those to divide into 4 equal groups

Here's what it looks like.

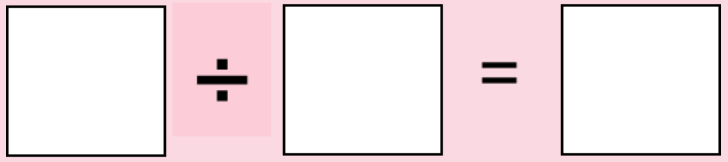
So I could write this as a multiplication equation

5 x 4 = 20



I could also write this as a division calculation.

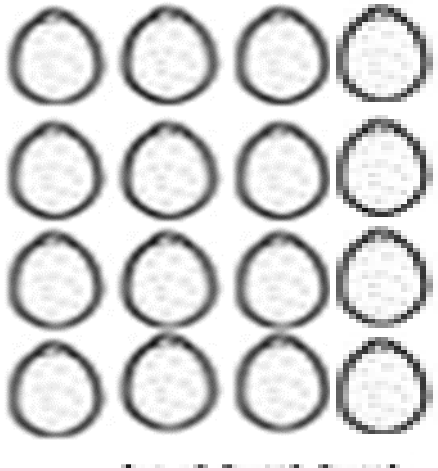
Can you have a try?



New learning

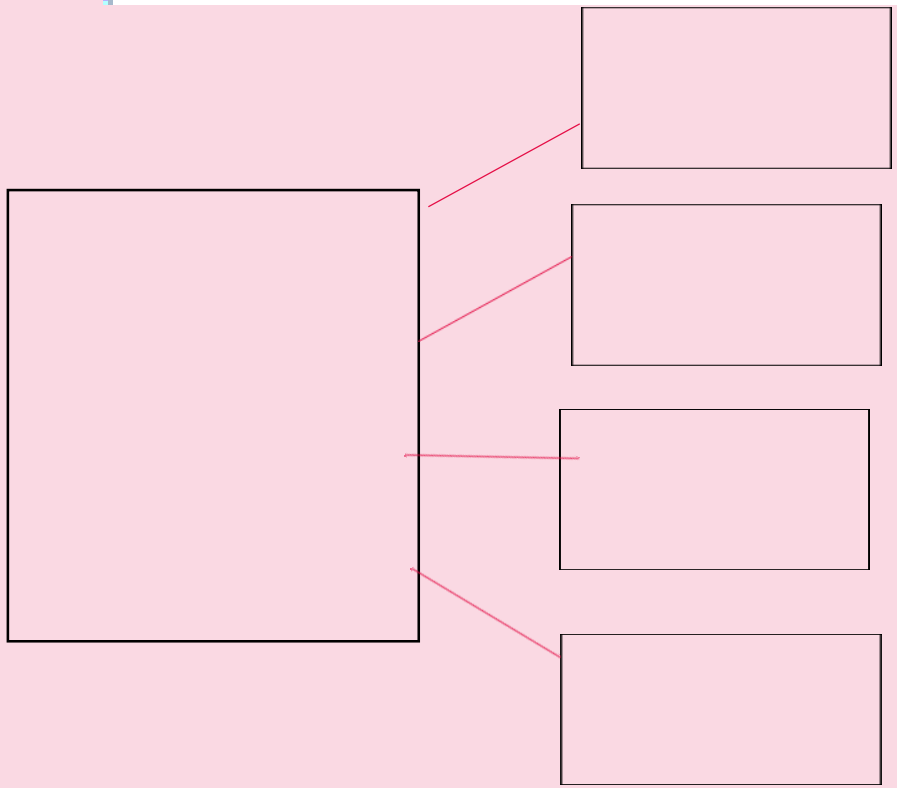
My turn

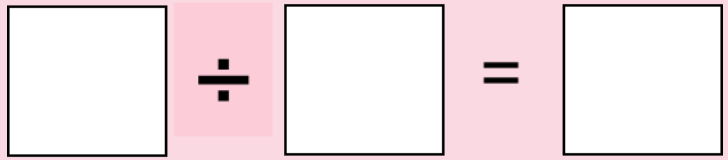
There are 16 lemons. Divide them into 4 equal groups.



What division equation can you say?

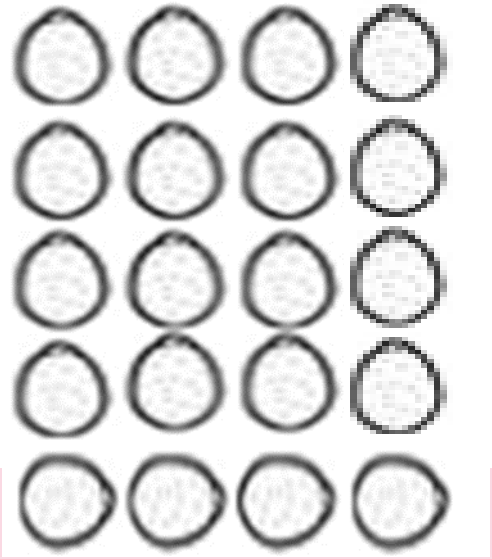
What other equations can you say?





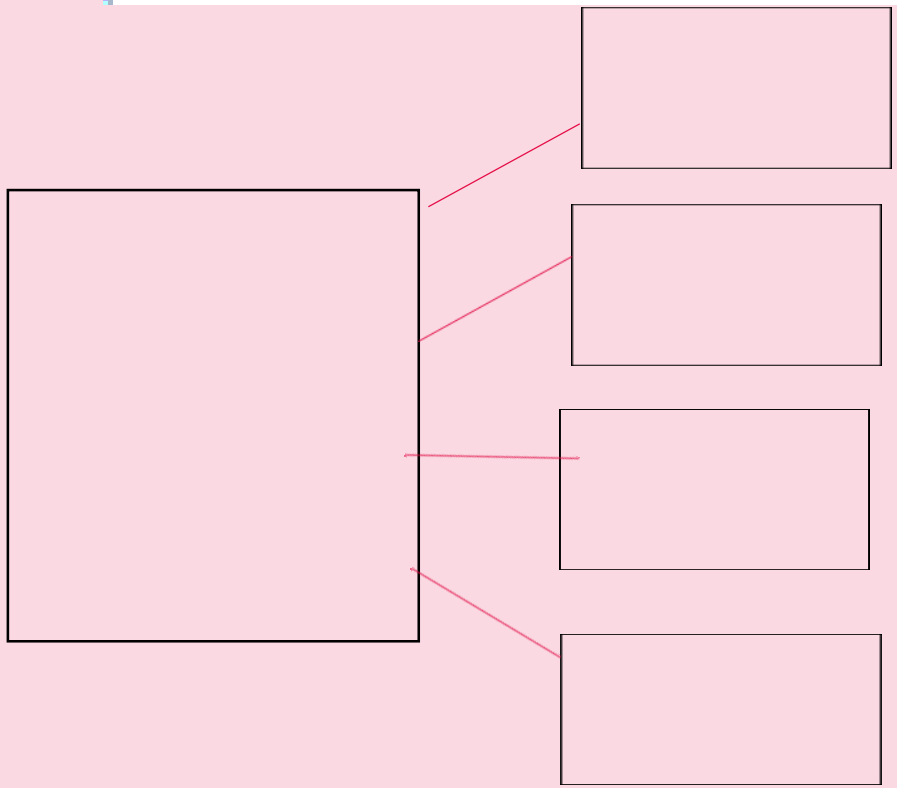
Our turn

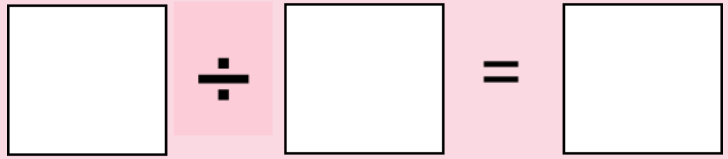
There are 20 lemons. Divide them into 4 equal groups



What division equation can you say?

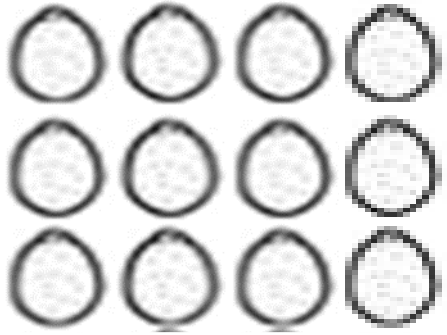
What other equations can you say?





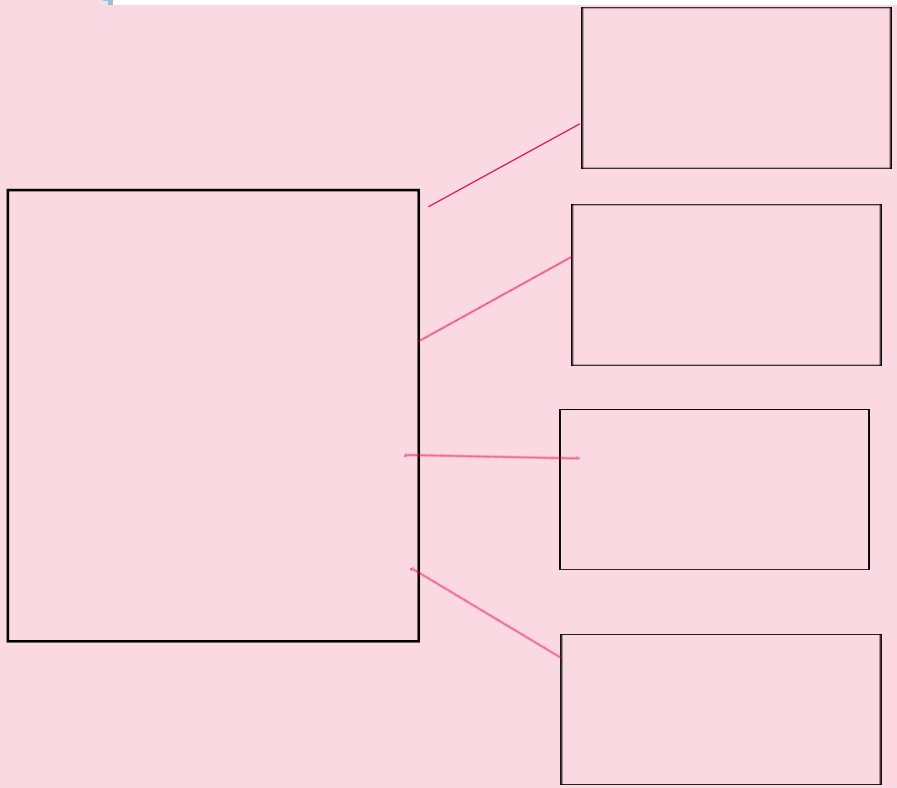
Your turn

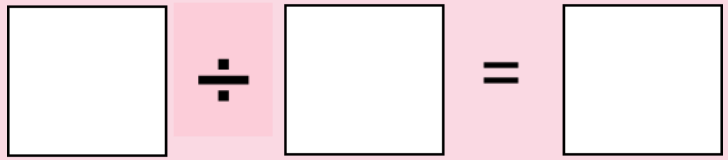
There are 12 lemons. Divide them into 4 equal groups



What division equation can you say?

What other equations can you say?

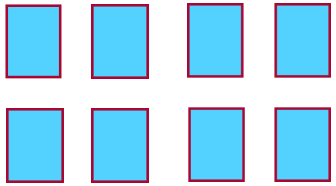




There are 8 stamps. Divide them into 4 equal groups.

What division equation can you say?

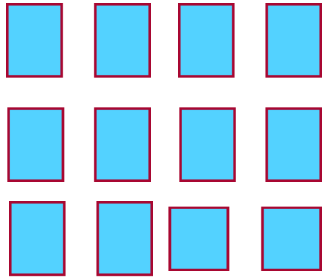
What other equations can you say?



There are 12 stamps. Divide them into 4 equal groups.

What division equation can you say?

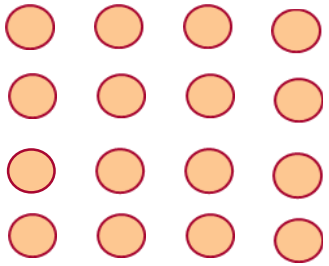
What other equations can you say?



There are 16 biscuits. Divide them into groups of 4.

What division equation can you say?

What other equations can you say?



$20 \div 4 =$ ☐ $20 \div 5 =$ ☐

Feedback

Was there anything you found tricky?

Was there anything you thought you did well with?

How can we help you?

Plenary