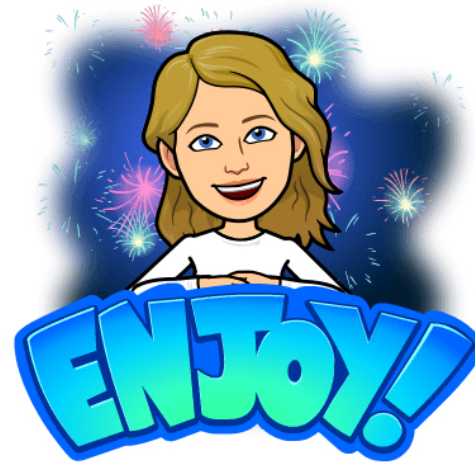


WELCOME

to today's Maths lesson

11.01.21

Using arrays



11.01.21

Using arrays



Good morning, Year 3.

In today's Maths lesson, we are going to be continuing with Multiplication and Division.

Please watch the following video and then work through the slides and activities:

<https://vimeo.com/469787855>

If you have any questions or would like to send in any work, please email it to:

yearthree@st-jo-st.dudley.sch.uk

Well done everyone, you are all superstars ☺

Love

Miss Robertson xxxx



Starter activities:

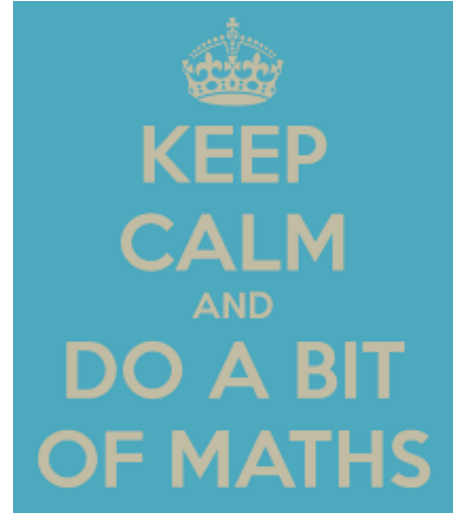
Task 1: Find 1 more/less than the middle number.

1 - less	Number	1 + more
	436	
	528	
801		802
	419	
	203	
	311	
		452

Task 2: Answer the subtraction questions.

- 1) $10 - 5 =$
- 2) $12 - 6 =$
- 3) $16 - 8 =$
- 4) $24 - 12 =$
- 5) $26 - 10 =$
- 6) $18 - 6 =$

- 7) $24 - 14 =$
- 8) $38 - 14 =$
- 9) $29 - 8 =$
- 10) $35 - 12 =$
- 11) $55 - 20 =$
- 12) $32 - 21 =$



Times table practise:

$9 \times 3 =$

$9 \times 3 =$

$6 \times 3 =$

$7 \times 3 =$

$2 \times 3 =$

$10 \times 3 =$

$10 \times 3 =$

$12 \times 3 =$

$5 \times 3 =$

$5 \times 3 =$

$1 \times 3 =$

$6 \times 3 =$

$4 \times 3 =$

$1 \times 3 =$

$8 \times 3 =$

$0 \times 3 =$

$11 \times 3 =$

$3 \times 3 =$

$7 \times 3 =$

$8 \times 3 =$

$0 \times 3 =$

$4 \times 3 =$

$3 \times 3 =$

$12 \times 3 =$

$12 \times 3 =$

$9 \times 3 =$

$2 \times 3 =$

$7 \times 3 =$

$11 \times 3 =$

$1 \times 3 =$

$4 \times 2 =$

$4 \times 11 =$

$4 \times 6 =$

$4 \times 5 =$

$4 \times 1 =$

$4 \times 8 =$

$4 \times 7 =$

$4 \times 9 =$

$4 \times 5 =$

$4 \times 2 =$

$4 \times 10 =$

$4 \times 6 =$

$4 \times 4 =$

$4 \times 4 =$

$4 \times 11 =$

$4 \times 7 =$

$4 \times 0 =$

$4 \times 10 =$

$4 \times 9 =$

$4 \times 12 =$

$4 \times 8 =$

$4 \times 0 =$

$4 \times 3 =$

$4 \times 8 =$

$4 \times 12 =$

$4 \times 7 =$

$4 \times 1 =$

$4 \times 1 =$

$4 \times 3 =$

$4 \times 11 =$

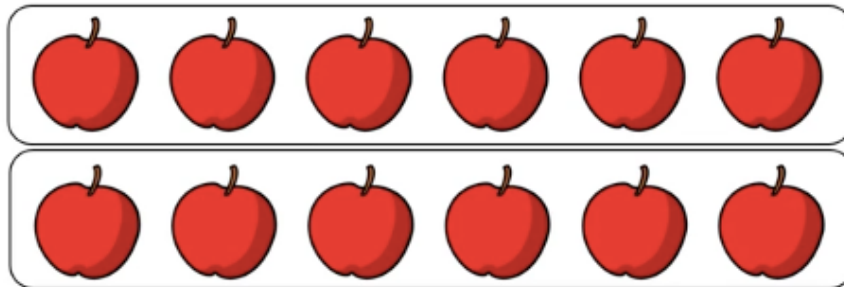
If you feel
confident with
your 3 times table,
have a go at your
4's 😊



What is an array?

An array is a set of objects that has been arranged into rows and columns.

2 rows

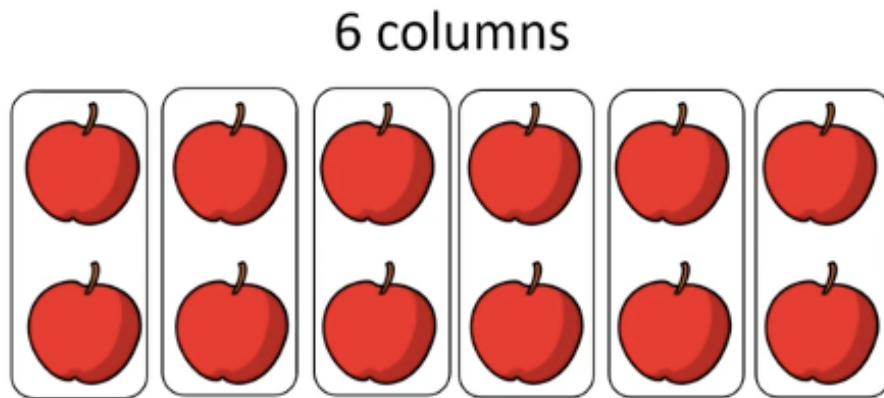


Rows go across from left to right. Each row must have the same number of objects.

We can represent this using **repeated addition** $6 + 6 = 12$
We can also represent it using **multiplication** $2 \times 6 = 12$

What is an array?

An array is a set of objects that has been arranged into rows and columns.



Columns go down from top to bottom. Each **column** must have the same number of objects.

We can represent this using **repeated addition** $2 + 2 + 2 + 2 + 2 + 2 = 12$
We can also represent it using **multiplication** $6 \times 2 = 12$

1 How many pears are there?



$$\square + \square + \square = \square$$

$$\square \times \square = \square$$

There are pears.

2 How many stars are there?



$$\square + \square = \square$$

$$\square \times \square = \square$$

There are stars.

To help you with this one, use pasta (or anything you have in your house) How many equal groups can you make with 12?

3 Write two additions and two multiplications for the array.



What do you notice?

4 Write two multiplications for this array.



5 Draw an array to show 7×3
Complete the number sentence.

$$7 \times 3 = \square$$

Is there more than one way to draw the array?

6 Draw three different arrays to show 12

Deepen it:



Complete the table.

	$5 \times 3 = \square$	$3 \times \square = \square$
	$4 \times \square = \square$	$\square \times \square = \square$
	$\square \times \square = \square$	$\square \times \square = \square$
	$\square \times \square = \square$	$\square \times \square = \square$
	$5 \times 4 = \square$	$\square \times \square = \square$

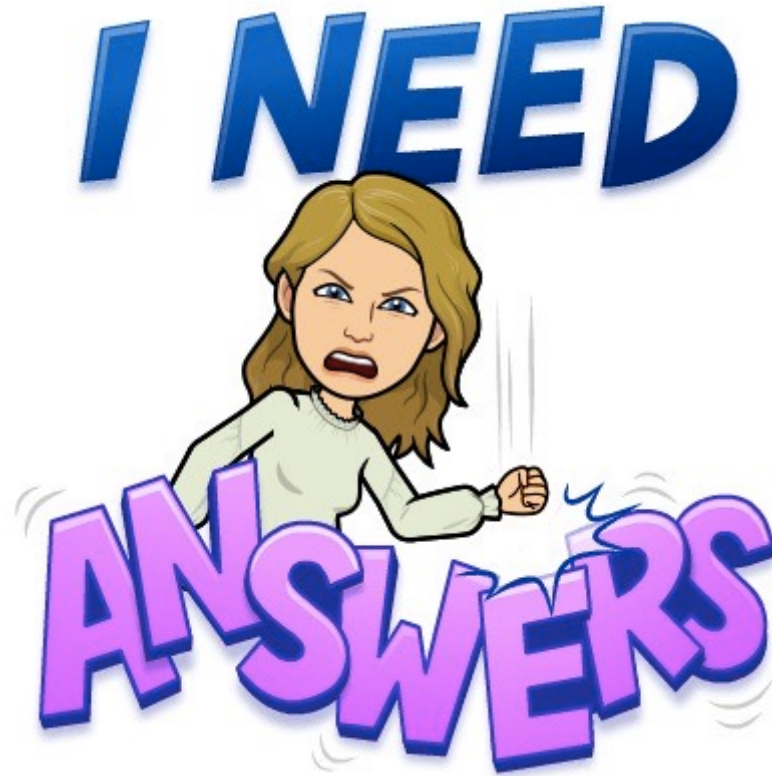
Use arrays to explain your answers.



James

3 multiplied by 10 is the same as 10 lots of 3.

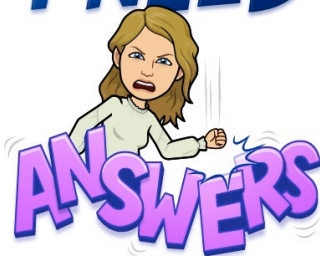
Do you agree or disagree? Why?



**Answers are coming up on the next slide.
No peeking until you have completed the
questions 😊**

Use arrays

I NEED



1 How many pears are there?



$$5 + 5 + 5 = 15$$

$$3 \times 5 = 15$$

There are 15 pears.

2 How many stars are there?



$$6 + 6 = 12$$

$$2 \times 6 = 12$$

There are 12 stars.

3 Write two additions and two multiplications for the array.



$$4 + 4 + 4 = 12$$

$$3 \times 4 = 12$$

$$3 + 3 + 3 + 3 = 12$$

$$4 \times 3 = 12$$

What do you notice?

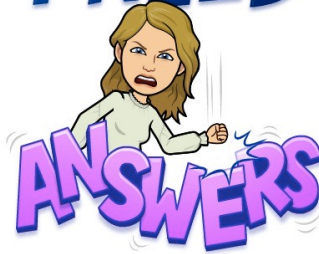
4 Write two multiplications for this array.







$$2 \times 9 = 18$$

$$9 \times 2 = 18$$

I NEED

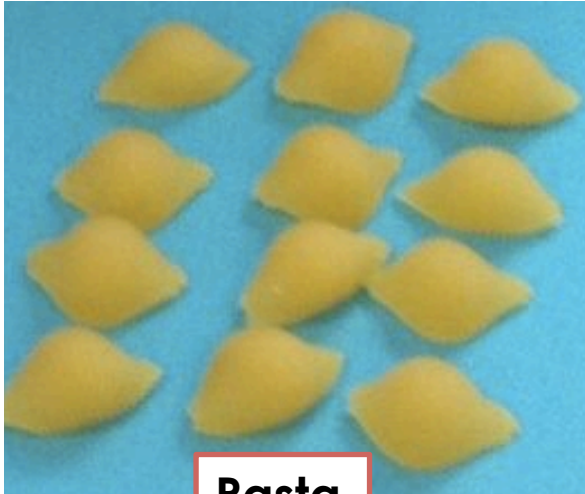


	$5 \times 3 = 15$	$3 \times 5 = 15$
	$4 \times 2 = 8$	$2 \times 4 = 8$
	$10 \times 2 = 20$	$2 \times 10 = 20$
	$7 \times 2 = 14$	$2 \times 7 = 14$
Children draw an array with four rows of five or five rows of four.	$5 \times 4 = 20$	$4 \times 5 = 20$

James is correct, as multiplication can be done in any order. Both calculations would have an answer of 30.

Practical arrays: Why not try making some different arrays with things you have at home?

Remember there must be the same amount in each group.



Pasta



Cereal

**Christmas
chocolates**



Toys

Eggs



Thank you for working so hard.

Please send in any photos of your work or any questions you have to yearthree@st-jo-st.dudley.sch.uk

It is always a pleasure to see all of your work.

