

11.1.21

Fix it time

Multiplication warm up

Can you answer these questions?

$$5 \times 3 = \underline{\quad}$$

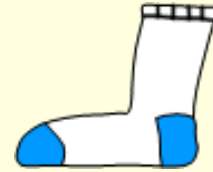
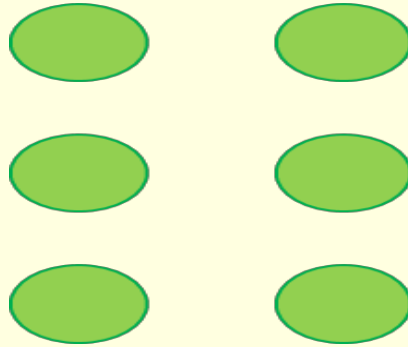
$$10 \times 7 = \underline{\quad}$$

$$2 \times 11 = \underline{\quad}$$



Today we are learning to
Multiply using arrays.

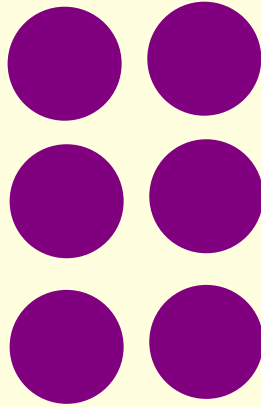
What is an array?



An array is an arrangement of objects in lines or columns.

This makes things very easy to count.

We know we have 2, 3 times.

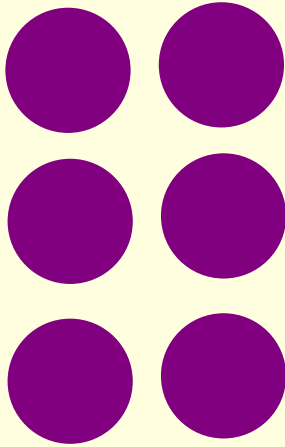


$$\begin{array}{ccccccc} & & x & & = & & \\ \hline 3 & & 6 & & 2 & & \end{array}$$

We can write this as a number sentence using x.

Well done!

Could this number sentence be written in a different order and have the same answer?



2 3
6

$$\underline{\quad 2 \quad \times \quad 3 \quad = \quad 6 \quad}$$

or

$$\underline{\quad \quad \times \quad \quad = \quad}$$

Can you write this as
an addition number
sentence?

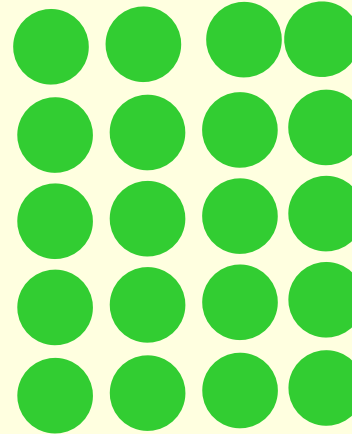
We know we have —, — times.

$$\underline{\quad \quad \times \quad \quad = \quad \quad}$$

or

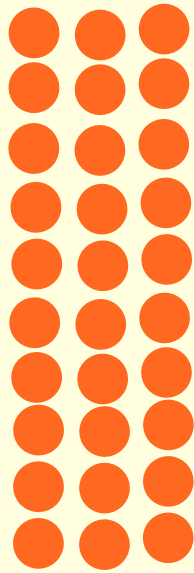
$$\underline{\quad \quad \times \quad \quad = \quad \quad}$$

20 4 5 4 5 20



Can you write this as
an addition number
sentence?

We know we have —, — times.



$$\underline{\hspace{2cm} \times \hspace{2cm} = \hspace{2cm}}$$

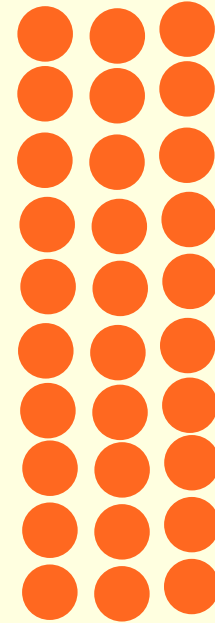
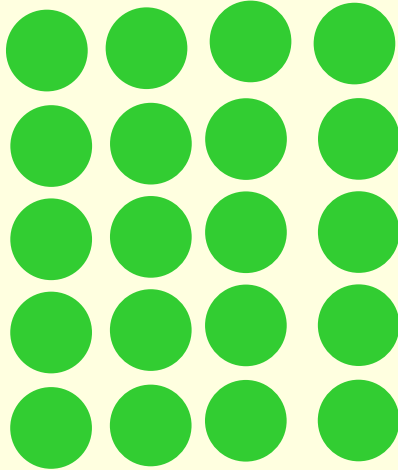
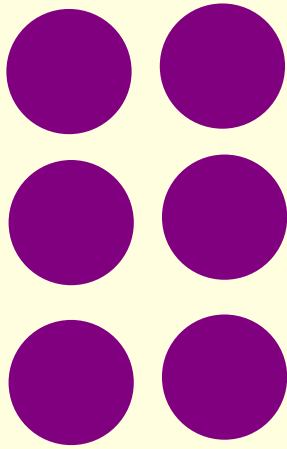
or

$$\underline{\hspace{2cm} \times \hspace{2cm} = \hspace{2cm}}$$

Can you write this as
an addition number
sentence?

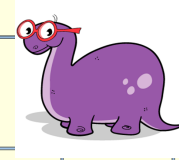
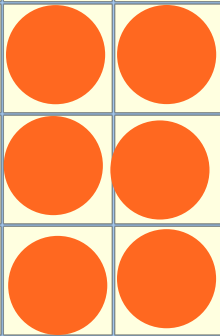
30 3 10 10 3 30

Today we are going to use arrays to prove that multiplication of two numbers can be done in any order.



1 1. 1. 2 1

$$2 \times 3 =$$

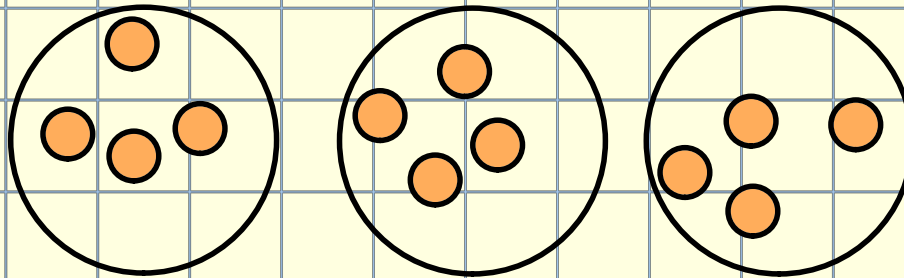




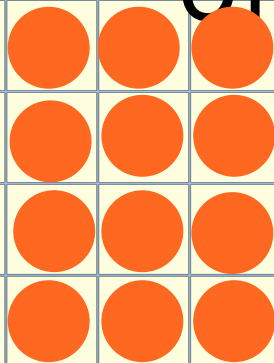
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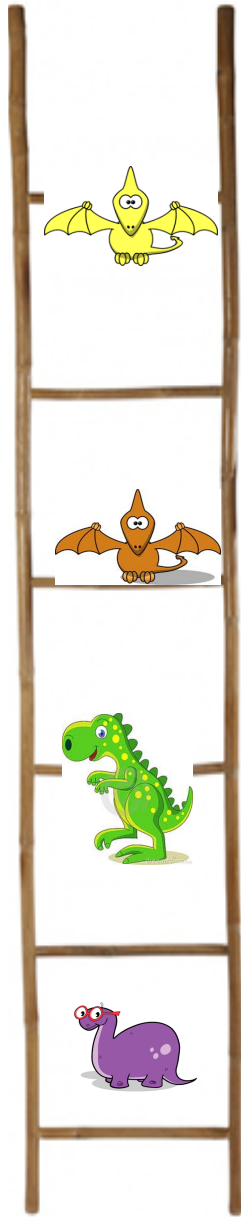
$$3 \times 4 =$$

$$4 \times 3 =$$



or you can do this:





Step Up

I can use arrays to prove that multiplication of two numbers can be done in any order.

I can confidently use multiplication facts for 2, 5 and 10 timetables.

I can use arrays to prove that multiplication of two numbers can be done in any order.

I can use multiplication facts for 2, 5 and 10 timetables.

I can make my own arrays.

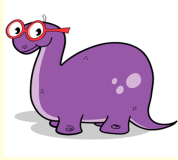
I can write a number sentence.

I can multiply using arrays.

I can make my own arrays.

I can write a number sentence with support.

I can multiply using arrays.



2, 2 times

2, 5 times

5, 3 times

5, 4 times

2, 4 times

4, 5 times

5, 2 times

$4 \times 3 =$

$5 \times 5 =$



$4 \times 3 =$

$5 \times 5 =$

$2 \times 3 =$

$5 \times 2 =$

$5 \times 9 =$

$2 \times 6 =$

$2 \times 5 =$

$5 \times 10 =$

$2 \times 10 =$



$5 \times 3 =$

$5 \times 5 =$

$2 \times 5 =$

$4 \times 5 =$

$5 \times 6 =$

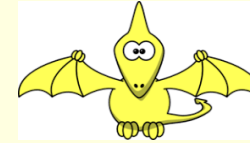
$5 \times 2 =$

$2 \times 6 =$

$2 \times 9 =$

$5 \times 4 =$

$6 \times 3 =$



$2 \times 6 =$

$2 \times 9 =$

$5 \times 4 =$

$6 \times 3 =$

$3 \times 5 =$

$5 \times 10 =$

$3 \times 3 =$

$3 \times 6 =$

$3 \times 9 =$

$3 \times 10 =$