

Year 3

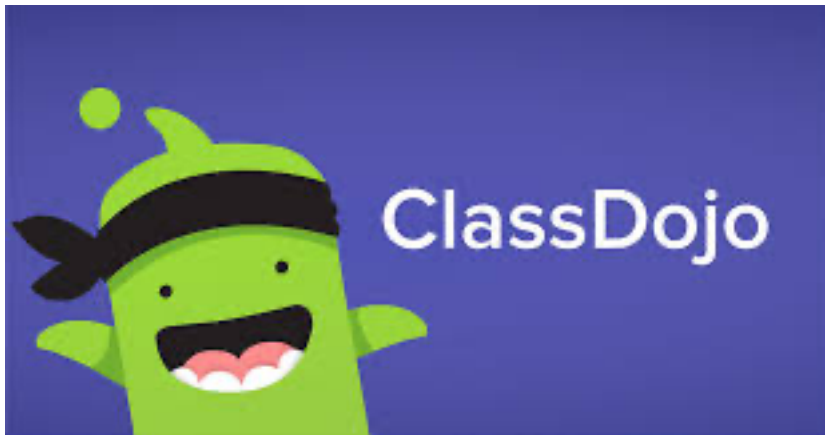
Maths Lesson

11.1.21

Home Learning Powerpoint – If you have any problems, just send us a Dojo message.

On this maths powerpoint:

- 1 warm up activity
- 1 maths lesson



Remember – you can get Dojos for posting pictures of your work on Class Dojo!



Warm Up Activity



Practise doubling numbers!

Easier

1. Double 10 =
2. Double of 20 =
3. Double of 16 =
4. Double of 22 =
5. Double of 12 =
6. Double of 14 =

How do you do it?

With smaller numbers, use counters.

You can use anything as counters. E.g. pennies, straws, bits of cut up paper etc.

Harder

1. Double of 64 =
2. Double of 86 =
3. Double of 48 =
4. Double of 32 =
5. Double of 54 =
6. Double of 58 =

How do you do it?

With bigger numbers, split it up into tens and units. Double the tens first, then the units. Then add your two answers together.

Example:

54 = 50 and 4

Double
of 50 =
100

Double
of 4 =
8

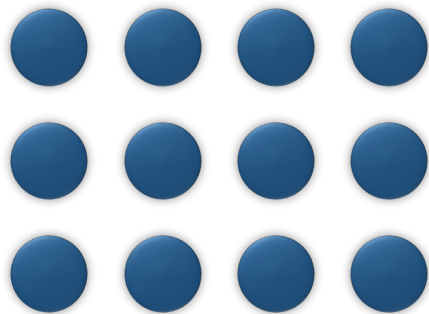
Add 100
and 8
together
= 108

Maths Lesson

11.1.21

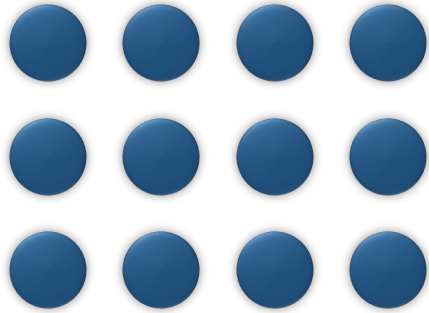
Write out your
objective and date in
your exercise book.

Objective: Understand multiplication and division as
arrays.



This is an **array** of dots.

Day 1: To understand multiplication and division as arrays.



What does this
array show?

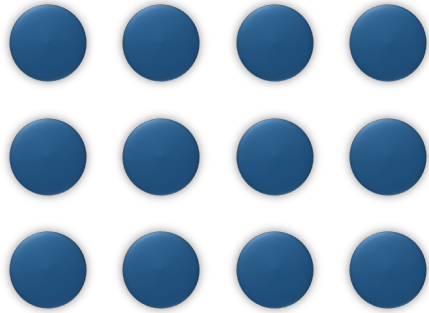
3 lots of 4.

$$3 \times 4 = ?$$

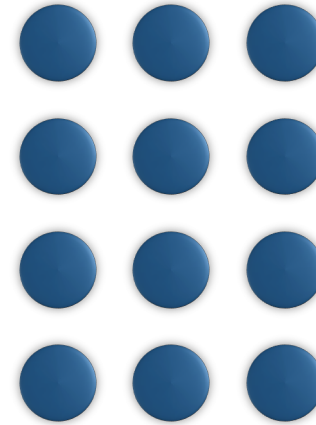
How many 4s in 12?

$$12 \div 4 = ?$$

Day 1: To understand multiplication and division as arrays.



We can rotate
the **array**.



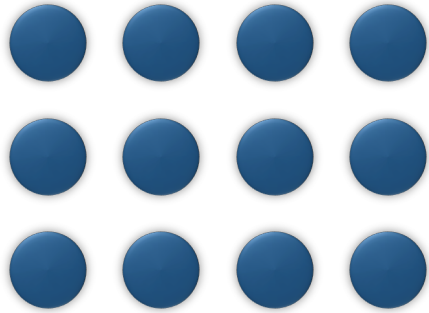
What has stayed the
same? What has
changed?


4 lots of 3 or $4 \times 3 = ?$

How many 3s in 12?

$12 \div 3 = ?$

Day 1: To understand multiplication and division as arrays.



Write the
four multiplication
and division facts
for this array. 

$$3 \times 4 = 12$$

$$4 \times 3 = 12$$

$$12 \div 4 = 3$$

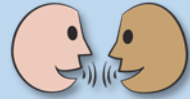
$$12 \div 3 = 4$$

Have you got all
four?

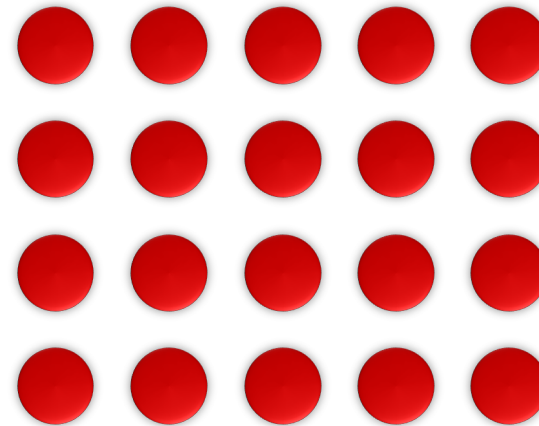
What do you notice
about the four
number sentences?


They all contain
a 3, 4 and 12!

Day 1: To understand multiplication and division as arrays.



What would an array
look like for 4×5 ?



Write down the four
number sentences
for this array. 

Remember you can
turn it around!

$$4 \times 5 = 20$$

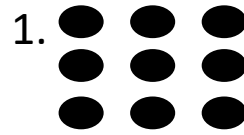
$$5 \times 4 = 20$$

$$20 \div 5 = 4$$

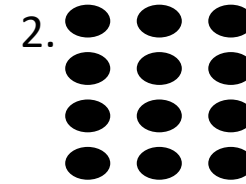
$$20 \div 4 = 5$$

Task 1:

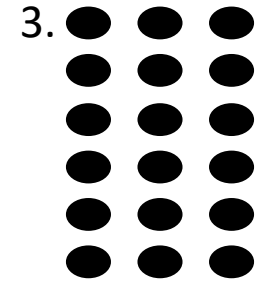
Write out the multiplication and division calculations that go with the arrays shown.



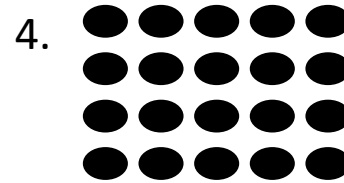
$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



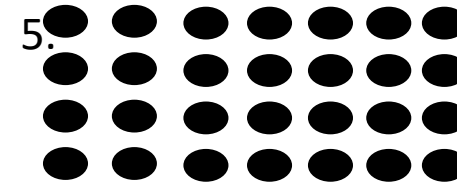
$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



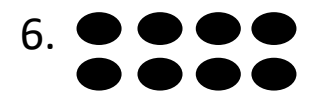
$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



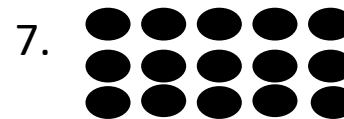
$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



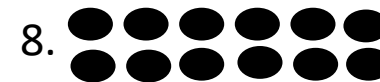
$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



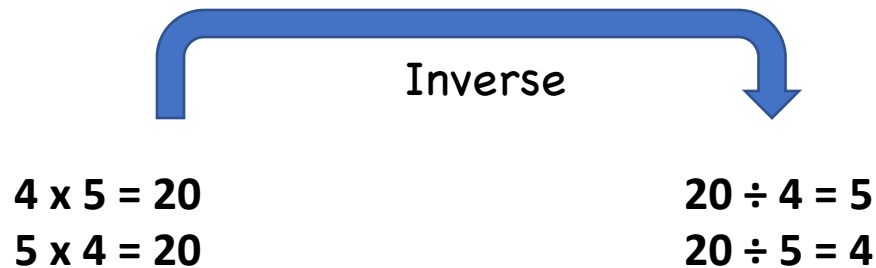
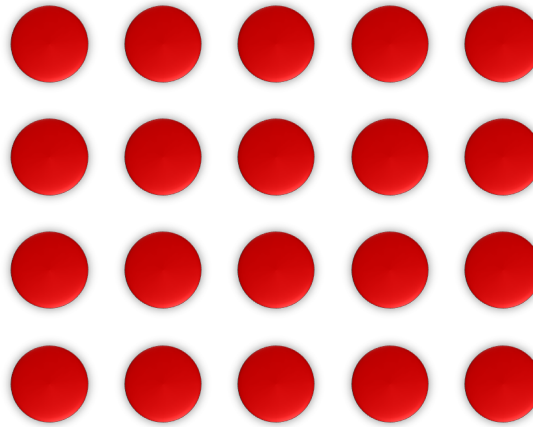
$$\begin{array}{l} ___ \times ___ = ___ \\ ___ \times ___ = ___ \\ ___ \div ___ = ___ \\ ___ \div ___ = ___ \end{array}$$



Inverse calculations

Did you notice?

The calculations that go with this array are inverse to one another!



What does inverse mean?

Something that is the opposite or reverse of something else.

Task 2: Choose a level below. Write out the calculation and it's inverse calculation.

Multiplication and division								
Bronze			Silver			Gold		
<input type="text"/> x 3 = 9	9 ÷ 3 =	<input type="text"/>	<input type="text"/> x 3 = 21	21 ÷ 3 =	<input type="text"/>	<input type="text"/> x 3 = 36	36 ÷ 3 =	<input type="text"/>
<input type="text"/> x 10 = 20	20 ÷ 10 =	<input type="text"/>	<input type="text"/> x 10 = 100	100 ÷ 10 =	<input type="text"/>	<input type="text"/> x 10 = 90	90 ÷ 10 =	<input type="text"/>
<input type="text"/> x 2 = 8	8 ÷ 2 =	<input type="text"/>	<input type="text"/> x 2 = 16	16 ÷ 2 =	<input type="text"/>	<input type="text"/> x 2 = 22	22 ÷ 2 =	<input type="text"/>
<input type="text"/> x 4 = 16	16 ÷ 4 =	<input type="text"/>	<input type="text"/> x 4 = 20	20 ÷ 4 =	<input type="text"/>	<input type="text"/> x 4 = 36	36 ÷ 4 =	<input type="text"/>
<input type="text"/> x 5 = 25	25 ÷ 5 =	<input type="text"/>	<input type="text"/> x 5 = 45	45 ÷ 5 =	<input type="text"/>	<input type="text"/> x 5 = 35	35 ÷ 5 =	<input type="text"/>
<input type="text"/> x 3 = 18	18 ÷ 3 =	<input type="text"/>	<input type="text"/> x 3 = 33	33 ÷ 3 =	<input type="text"/>	<input type="text"/> x 3 = 27	27 ÷ 3 =	<input type="text"/>
<input type="text"/> x 5 = 15	15 ÷ 5 =	<input type="text"/>	<input type="text"/> x 5 = 30	30 ÷ 5 =	<input type="text"/>	<input type="text"/> x 5 = 60	60 ÷ 5 =	<input type="text"/>
<input type="text"/> x 2 = 14	14 ÷ 2 =	<input type="text"/>	<input type="text"/> x 2 = 24	24 ÷ 3 =	<input type="text"/>	<input type="text"/> x 2 = 18	18 ÷ 2 =	<input type="text"/>
<input type="text"/> x 10 = 40	40 ÷ 10 =	<input type="text"/>	<input type="text"/> x 10 = 70	70 ÷ 10 =	<input type="text"/>	<input type="text"/> x 10 = 110	110 ÷ 10 =	<input type="text"/>
<input type="text"/> x 4 = 24	24 ÷ 4 =	<input type="text"/>	<input type="text"/> x 4 = 36	36 ÷ 4 =	<input type="text"/>	<input type="text"/> x 4 = 48	48 ÷ 4 =	<input type="text"/>

Challenge



Challenge

How many different arrays can you create from 48 chairs? Record the multiplication and related division sentences for each.