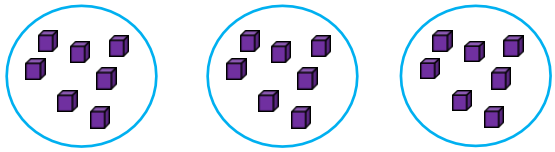
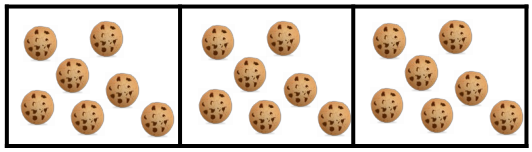
Equal Groups



7 x 3 = 21

There are 3 groups with the same amount in each group.
They are equal groups.

Repeated Addition



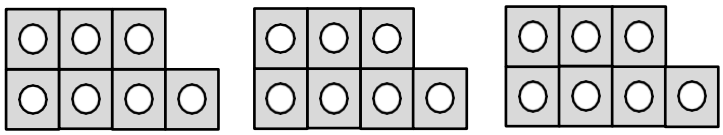
7 x 3 = 21

7 + 7 + 7

Adding the same number again and again.

Multiply

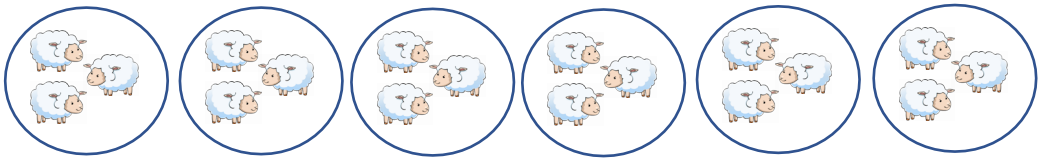
To add equal groups of numbers.



7 x 3 = 21

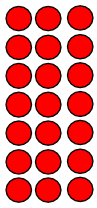
There are 3 lots of 7s.

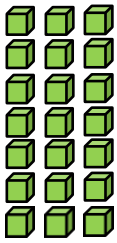
Lots Of...

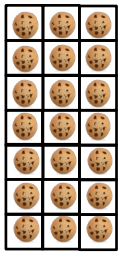


There are 7 lots of 3s.
This helps us write our multiplication sentence.
7 lots of 3 show us 3, 7 times. 3 x 7 = 21

Arrays







These arrays show
7 x 3 = 21

Arrays are objects or shapes in rows and columns.
They help us to multiply.

Multiplier

7 x 3 = 21

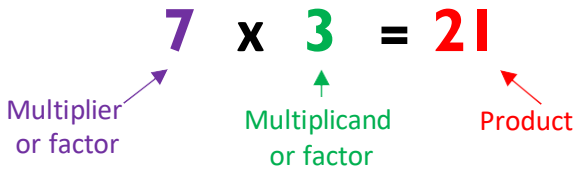
Multiplier or factor

Multiplicand or factor

Product

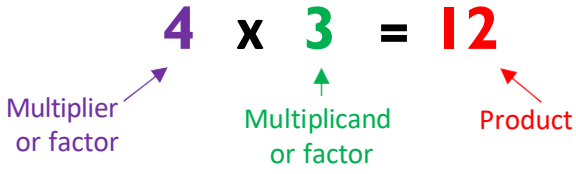
The number you are multiplying by.
We can also call this a factor!

Multiplicand



The number that gets multiplied.
We can also call this a factor!

Product



The answer when two or more numbers are multiplied.

Commutative Law

When you multiply numbers, you will get the same answer when you swap the numbers around.

7 x 8 = 56

8 x 7 = 56

Six Times Tables

Repeated addition in groups of 6s.
We should learn our 6 times tables up to 12 x 6.

 1 x 6 = 6

 2 x 6 = 12

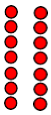
 3 x 6 = 18

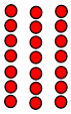
 4 x 6 = 24

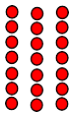
Seven Times Tables

Repeated addition in groups of 7s.
We should learn our 7 times tables up to 12 x 7.

 1 x 7 = 7

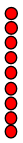
 2 x 7 = 14

 3 x 7 = 21

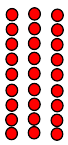
 4 x 7 = 28

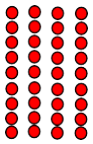
Nine Times Tables

Repeated addition in groups of 9s.
We should learn our 9 times tables up to 12 x 9.

 1 x 9 = 9

 2 x 9 = 18

 3 x 9 = 27

 4 x 9 = 36

Sharing

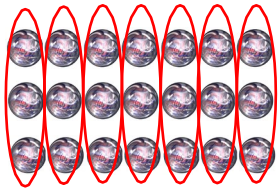
I have twenty-one cakes and I share them equally into 3 plates.
How many cakes will be in each plate?

$21 \div 3 = 7$

Grouping

I have 7 groups of 3.

A jar fits 3 marbles.
I have 21 marbles to put away.
How many jars will I need?



$21 \div 3 = 7$

Division Facts

The division number sentence related to times tables.

$7 \div 7 = 1$ $14 \div 2 = 7$

$21 \div 3 = 7$ $28 \div 4 = 7$

These are division facts for the 7 times tables.

Divide

To split (a number) into equal parts or groups.

$18 \div 6 = 3$

You can divide by **sharing** or **grouping**.

Sharing

I have 18 cakes and I share them equally into 6 plates.
How many cakes will be in each plate?

$18 \div 6 = 3$

Grouping

I have 3 groups of 6.

A jar fits 6 marbles.
I have 18 marbles to put away.
How many jars will I need?

$18 \div 6 = 3$

Division Facts

The division number sentence related to times tables.

$7 \div 7 = 1$ $14 \div 2 = 7$

$21 \div 3 = 7$ $28 \div 4 = 7$

These are division facts for the 7 times tables.

Inverse

$3 \times 6 = 18$ **$18 \div 6 = 3$**

This means the opposite or reverse in maths.
We use the inverse to check our calculations.
The inverse of multiplication is division.
The inverse of division is multiplication.

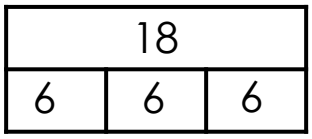
Concrete Methods

Equipment that you can touch to help you solve calculations.

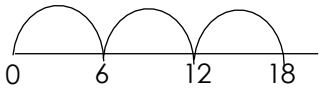
You could divide cubes or marbles into jars… or even chocolate!

Pictorial Methods

Pictures that you can see or draw to help you solve calculations.



Bar methods



Number lines

Arrays

Distributive Law

If you didn't know 7 x 8, you could do 5 x 8 and add the answer to 2 x 8.
You would get the correct answer!

5 x 8 = 40

2 x 8 = 16

7 **56**

7 x 8 = 56

I have 'distributed' (spread out)
the 7 into a 5 and a 2
and multiplied them both by 8.
I then add the products.

Multiple

We get <u>multiples</u> after multiplying the number by a whole number.

6 x 1 = **6** 6 x 2 = **12** 6 x 3 = **18**

These are multiples of 6. Can you think of any more?

Fact Family

Related facts for a calculation.

$6 \times 4 = 24$ $4 \times 6 = 24$

$24 \div 6 = 4$ $24 \div 4 = 6$

Equal Groups

7 x 3 = 21

There are 3 groups with the same amount in each group.
They are equal groups.

Lots of...

There are 7 lots of 3s.
This helps us write our multiplication sentence.
7 lots of 3 show us 3, 7 times. 3 x 7 = 21

Multiplicand

7 x 3 = 21

Multiplier or factor — Multiplicand or factor — Product

The number that gets multiplied.
We can also call this a factor!

Repeated Addition

7 x 3 = 21
7 + 7 + 7
Adding the same number again and again.

Arrays

These arrays show
7 x 3 = 21

Arrays are objects or shapes in rows and columns.
They help us to multiply.

Product

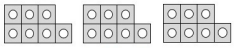
4 x 3 = 12

Multiplier or factor — Multiplicand or factor — Product

The answer when two or more numbers are multiplied.

Multiply

To add equal groups of numbers.



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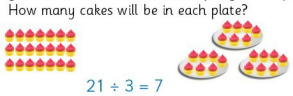

21 ÷ 3 = 7

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Repeated addition in groups of 7s.
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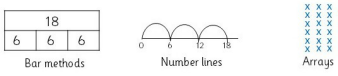

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24 ÷ 6 = 4 24 ÷ 4 = 6

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Year 4 – Autumn Multiplication Vocabulary Assessment				masterthecurriculum.co.uk	
Equal Groups		Repeated Addition		Multiply	
Lots Of...		Arrays		Multiplier	
Multiplicand		Product		Commutative Law	
Six Times Tables		Seven Times Tables		Nine Times Tables	
Sharing		Grouping		Division Facts	
Divide		Sharing		Grouping	
Division Facts		Inverse		Concrete Methods	
Pictorial Methods		Distributive Law		Multiple	
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