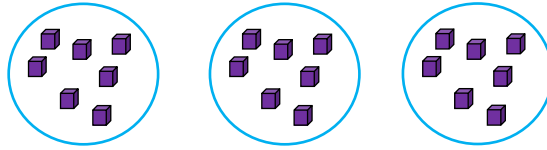


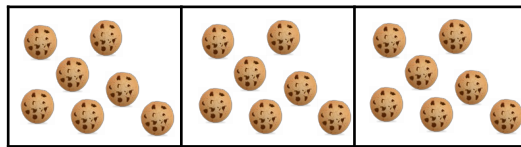
Equal Groups



$$7 \times 3 = 21$$

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

Repeated Addition



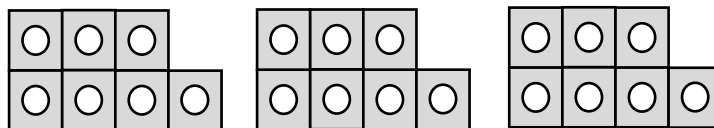
$$7 \times 3 = 21$$

$$7 + 7 + 7$$

Adding the same number again and again.

Multiply

To add equal groups of numbers.



$$7 \times 3 = 21$$

There are 3 lots of 7s.

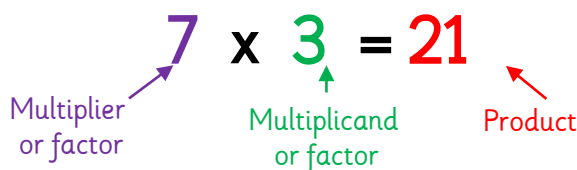


Arrays

These arrays show
 $7 \times 3 = 21$

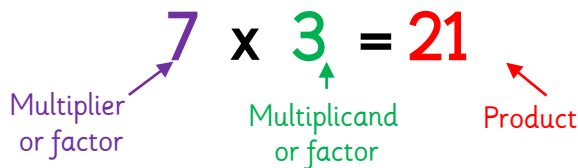
Arrays are objects or shapes in rows and columns.
 They help us to multiply.

Multiplier



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

$$4 \times 3 = 12$$

Multiplier or factor (4) Multiplicand or factor (3) Product (12)

The answer when two or more numbers are multiplied.

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Commutative Law

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

$$7 \times 8 = 56$$

$$8 \times 7 = 56$$

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Distributive Law

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

$$5 \times 8 = 40$$

$$2 \times 8 = 16$$

$$7 \times 8 = 56$$

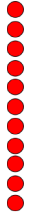
I have 'distributed' (spread out) the 7 into a 5 and a 2 and multiplied them both by 8. I then add the products.

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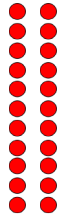
Eleven Times Tables

Repeated addition in groups of 11s.

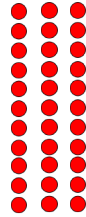
We should learn our 11 times tables up to 12×11 .



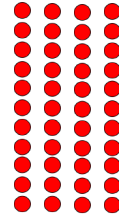
$1 \times 11 = 11$



$2 \times 11 = 22$



$3 \times 11 = 33$

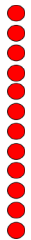


$4 \times 11 = 44$

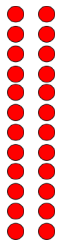
Twelve Times Tables

Repeated addition in groups of 12s.

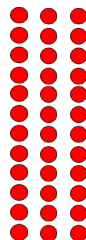
We should learn our 11 times tables up to 12×11 .



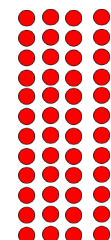
$1 \times 12 = 12$



$2 \times 12 = 24$



$3 \times 12 = 36$



$4 \times 12 = 48$

Divide

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

$18 \div 6 = 3$

You can divide by sharing or grouping.

Division Facts

The division number sentence related to times tables.

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

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

These are division facts for the 7 times tables.

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Dividend

The diagram shows the equation $44 \div 11 = 4$. The number 44 is purple, 11 is green, and 4 is red. A purple arrow points from the word 'Dividend' to the number 44. A green arrow points from the word 'Divisor' to the number 11. A red arrow points from the word 'Quotient' to the number 4.

The number that is being divided into equal groups.

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Divisor

The diagram shows the equation $44 \div 11 = 4$. The number 44 is purple, 11 is green, and 4 is red. A purple arrow points from the word 'Dividend' to the number 44. A green arrow points from the word 'Divisor' to the number 11. A red arrow points from the word 'Quotient' to the number 4.

The number of groups that the **dividend** is being divided into.

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Quotient

$$44 \div 11 = 4$$

Diagram illustrating the division equation $44 \div 11 = 4$. The number 44 is labeled as the Dividend (purple arrow), 11 is labeled as the Divisor (green arrow), and 4 is labeled as the Quotient (red arrow).

The result of a division calculation.

Multiple

We get multiples after multiplying a number by a whole number.

$$6 \times 1 = \underline{6} \quad 6 \times 2 = \underline{12} \quad 6 \times 3 = \underline{18}$$


Diagram illustrating multiplication equations: $6 \times 1 = 6$, $6 \times 2 = 12$, and $6 \times 3 = 18$. The results 6, 12, and 18 are underlined in red. Blue arrows point from the underlined results back to the number 6, indicating they are multiples of 6.

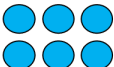
These are multiples of 6. Can you think of any more?


Factors

A number that divides into another number without leaving a remainder.

Factor of 6 are: 1, 2, 3 and 6

$$1 \times 6 = 6$$


$$2 \times 3 = 6$$


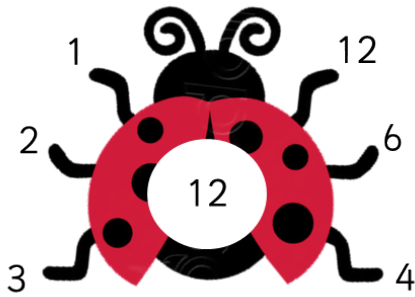
$$3 \times 2 = 6$$


$$6 \times 1 = 6$$



Factor Pairs

A set of two factors which, when multiplied together, give a product.



Factors pairs of 12:

1 and 12 3 and 4 2 and 6

Partitioning

Tens	Ones

To split/ separate/ divide numbers into smaller parts. This can make calculations easier.

$$14 \times 4 = 10 \times 4 + 3 \times 4$$

Exchange

To change ten units in a place value column for one in the next column of equal value. This method is used when calculating.

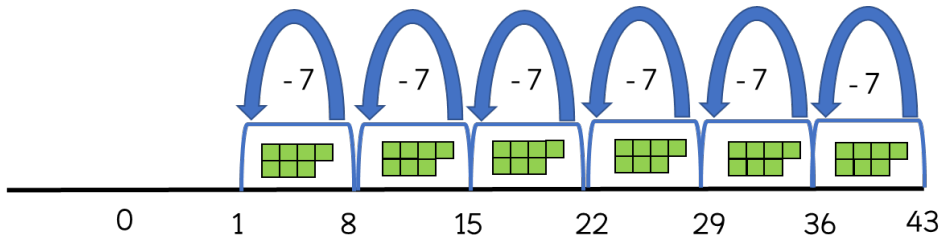
$$42 \div 3 = 14$$



Remainder


An amount left over after dividing.

$$43 \div 7 = 6 \text{ r } 1$$



Multiplication and Division - Spring Year 4

Equal Groups



$7 \times 3 = 21$

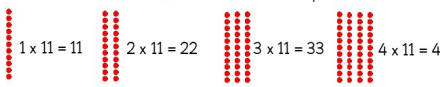
There are 3 groups with the same amount in each group. They are equal groups.

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Multiplication and Division - Spring Year 4

Eleven Times Tables

Repeated addition in groups of 11s.
We should learn our 11 times tables up to 12×11 .




$1 \times 11 = 11$ $2 \times 11 = 22$ $3 \times 11 = 33$ $4 \times 11 = 44$

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Multiplication and Division - Spring Year 4

Arrays




These arrays show $7 \times 3 = 21$

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

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Multiplication and Division - Spring Year 4

Repeated Addition



$7 \times 3 = 21$
 $7 + 7 + 7$

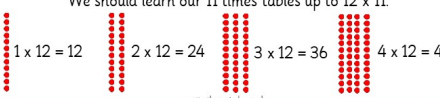
Adding the same number again and again.

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Multiplication and Division - Spring Year 4

Twelve Times Tables

Repeated addition in groups of 12s.
We should learn our 11 times tables up to 12×11 .



$1 \times 12 = 12$ $2 \times 12 = 24$ $3 \times 12 = 36$ $4 \times 12 = 48$

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Multiplication and Division - Spring Year 4

Multiplier

$7 \times 3 = 21$

Multiplier or factor Multiplicand or factor Product

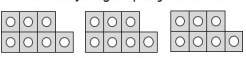
The number you are multiplying by. We can also call this a factor!

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Multiplication and Division - Spring Year 4

Multiply

To add equal groups of numbers.



$7 \times 3 = 21$

There are 3 lots of 7s.

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Multiplication and Division - Spring Year 4

Divide

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

$18 \div 6 = 3$

You can divide by sharing or grouping.

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Multiplication and Division - Spring Year 4

Multiplicand

$7 \times 3 = 21$

Multiplier or factor Multiplicand or factor Product

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

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Multiplication and Division - Spring Year 4

Product

$4 \times 3 = 12$

Multiplier or factor Multiplicand or factor Product

The answer when two or more numbers are multiplied.

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Multiplication and Division - Spring Year 4

Division Facts

The division number sentence related to times tables.

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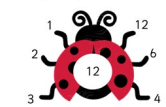
These are division facts for the 7 times tables.

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Multiplication and Division - Spring Year 4

Factor Pairs

A set of two factors which, when multiplied together, give a product.



Factors pairs of 12:
1 and 12 3 and 4 2 and 6

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Multiplication and Division - Spring Year 4

Commutative Law

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

$7 \times 8 = 56$
 $8 \times 7 = 56$

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Multiplication and Division - Spring Year 4

Dividend

$44 \div 11 = 4$

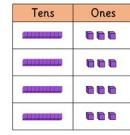
Dividend Divisor Quotient

The number that is being divided into equal groups.

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Multiplication and Division - Spring Year 4

Partitioning



To split/ separate/ divide numbers into smaller parts. This can make calculations easier.

$14 \times 4 = 10 \times 4 + 3 \times 4$

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Multiplication and Division - Spring Year 4

Distributive Law

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

$5 \times 8 = 40$ I have 'distributed' (spread out) the 7 into a 5 and a 2
 $2 \times 8 = 16$ and multiplied them both by 8
 $7 \times 8 = 56$ I then add the products.

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Multiplication and Division - Spring Year 4

Divisor

$44 \div 11 = 4$

Dividend Divisor Quotient

The number of groups that the dividend is being divided into.


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Multiplication and Division - Spring Year 4

Exchange

To change ten units in a place value column for one in the next column of equal value. This method is used when calculating.

$42 \div 3 = 14$



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Multiplication and Division - Spring Year 4

Quotient

$44 \div 11 = 4$

Dividend Divisor Quotient

The result of a division calculation.

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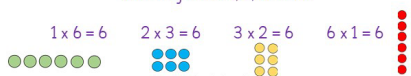
Multiplication and Division - Spring Year 4

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A number that divides into another number without leaving a remainder.

Factor of 6 are: 1, 2, 3 and 6

$1 \times 6 = 6$ $2 \times 3 = 6$ $3 \times 2 = 6$ $6 \times 1 = 6$



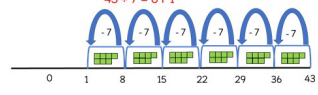
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Multiplication and Division - Spring Year 4

Remainder

An amount left over after dividing.

$43 \div 7 = 6 \text{ r } 1$



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Multiplication and Division - Spring Year 4

Multiple

We get multiples after multiplying a number by a whole number.

$6 \times 1 = 6$ $6 \times 2 = 12$ $6 \times 3 = 18$

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

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Year 4 – Spring Multiplication and Division Vocabulary Assessment

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Equal groups		Repeated Addition		Multiply	
Eleven Times Table		Twelve Times Table		Divide	
Array		Multiplier		Multiplicand	
Product		Commutative Law		Distributive Law	
Division Facts		Dividend		Divisor	
Quotient		Multiple		Factor	
Factor Pairs		Partitioning		Exchange	
Remainder					

Year 4 – Spring Multiplication and Division Vocabulary Assessment

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Year 4 – Spring Multiplication and Division Vocabulary Assessment

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