



Year 4 - Multiplication and Division A

Key vocabulary

Multiple	The result of multiplying a number by an integer (not by a fraction).
Integer	A whole number
Commutative Law	The Law that says you can swap numbers around and still get the same answer when you add.
Division	Division is splitting into equal parts or groups.

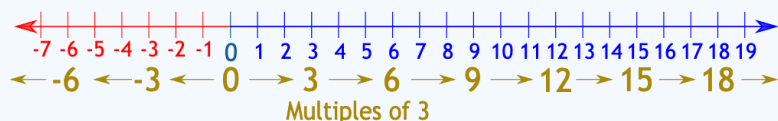
Multiples of 3

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiples of 3 are the result of multiplying an integer by 3.

All the multiples of 3 from 1 - 100 are highlighted in green.

What is the next multiple of 3?
What is the multiple of 3 before?
How many 3s are there in 12?



3, 6 and 9 Times Tables

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

All the multiples of 6 and 9 are multiples of 3

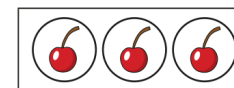
If you double a multiple of 3 the answer will be a multiple of 6.

Double $7 \times 3 = 7 \times 6$

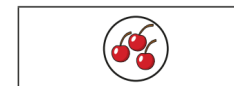
Multiplying by 1 and 0

When you multiply a number by 1, the result will always be the number itself. $7 \times 1 = 7$

3 lots of 1 =



1 lot of 3 =



When you multiply any number by zero the result is always zero. $7 \times 0 = 0$

0 lots of 3 =



Division - dividing by 1 and itself

5 grouped into 5s is equal to 1
($5 \div 5 = 1$)

When you divide a number by itself, the answer is 1.



There is 1 group of 2 in 2 $2 \div 2 = 1$



There is 1 group of 3 in 3 $3 \div 3 = 1$



There is 1 group of 4 in 4 $4 \div 4 = 1$

5 grouped into 1s is equal to 5
($5 \div 1 = 5$)

When you divide a number by 1, the number remains the same..

$$8 \div 1 = 8$$

Sharing



There is 1 8 in 8
There are 8 1s in 8

Grouping



Multiplying 3 Numbers

Alex and Teddy are working out $6 \times 5 \times 2$

Alex

$$\begin{aligned} 6 \times 5 \times 2 &= 6 \times 5 \times 2 \\ &= 30 \times 2 \\ &= 60 \end{aligned}$$

Teddy

$$\begin{aligned} 6 \times 5 \times 2 &= 6 \times 5 \times 2 \\ &= 6 \times 10 \\ &= 60 \end{aligned}$$

It does not matter how you group the numbers when they multiply.

$$\begin{aligned} \text{For example, } 4 \times 5 \times 2 &= \\ (4 \times 5) \times 2 &= 20 \times 2 = 40 \end{aligned}$$

or

$$4 \times (5 \times 2) = 4 \times 10 = 40$$

