

# Division



Year 1

Half of 6 is 3  
6 shared equally into 2 groups is 3 in each group

12 divided equally into 8 groups is 4 in each group

The groups are equal

12 divided equally into groups of 3 is 4 groups

There are four 3s in twelve

multiply equal share groups divide

0 3 6 9 12



Year 2

Three groups of four  
 $4 + 4 + 4 = 12$

4 multiplied by 3  
 $4 \times 3 = 12$

3 groups of 4  
 $3 \times 4 = 12$

multiply equal share groups divide

$12 \div 3 = 4$   
12 divided equally into 3 groups

$12 \div 3 = 4$   
12 divided equally into groups of 3

How many 3s in twelve?

0 3 6 9 12



Year 3

If I know... then I also know...

The digit sum of multiples of 3 is 3, 6 or 9

An odd number multiplied by 3 gives an odd product.

All multiples of 4 are even numbers.

There is a repeating pattern in the ones column 0, 4, 8, 2, 6

All multiples of 8 are even numbers.

All multiples of 8 are also multiples of 2 and 4



Year 6

If I know... then I also know... because.

$0.8 \times 7 = 8 \times 7 \div 10$   
 $4.2 \times 5 = 42 \div 2$        $56,000 \div 80 = 700$

$2427 \times 38$   
 $19416$   
 $72810$   
 $92226$

$24 \overline{) 3393}$   
 $0139r3$   
 $24 \overline{) 339125}$   
 $0139125$

$3391 \div 24 = 139 \text{ r}3 = 139 \frac{3}{24}$   
 $= 139.13 \text{ (to 2dp)}$



Year 4

30 is ten times smaller than 300  
20 divided by ten is 2

If I know  $24 \div 4 = 6$  then I know  $240 \div 4 = 60$

If I know  $24 \div 4 = 6$  then I know  $25 \div 4 = 6 \text{ r}1$

I know that 40 is 10 groups of 4

$52 \div 4 = 40 \div 4 + 12 \div 4 = 10 + 3 = 13$

0 40 52



Year 5

9423  $\div$  3

3 1 4 1  
3 | 9 4 2 3

1000s 100s 10s 1s

divisor  
dividend  
quotient  
remainder

If I know... then I also know... because.

0 5 7 6 r 1  
6 | 3 4 3 7

Year 5

100s 10s 1s

300 -100 = 200

252  $\div$  6  
 $= 240 \div 6 + 12 \div 6 = 40 + 2 = 42$

If I know  $24 \div 6 = 4$  then I also know  $240 \div 6 = 40$

426  $\div$  3

1 4 2  
3 | 4 2 6

Year 5

If I know... then I also know...

The digit sum of multiples of 6 is 3, 6 or 9

All multiples of 6 are even numbers.

multiply factor product

The digit sum of multiples of 9 is 9

An odd number multiplied by 9 gives an odd product.

An odd number multiplied by 7 gives an odd product.

An even number multiplied by 7 gives an even product.

$64 \times 0 = 0$   
The product of a number and zero is zero.

$64 \times 1 = 64$   
The product of a number and 1 is the number itself.

$64 \div 1 = 64$   
The quotient when dividing a number by 1 is the number itself.

Year 5

If I know... then I also know...

If the digits are the same then a 2-digit number is divisible by 11

An odd number multiplied by 11 gives an odd product.

multiply factor product

A number is divisible by 12 if it is divisible by 3 and 4

All multiples of 12 are even numbers.

$12 \times 6 = 72$        $6 \times 12 = 72$   
 $72 \div 12 = 6$        $72 \div 6 = 12$   
 $72 \div 12 = 6$        $72 \div 6 = 12$

If I know... then I also know...

$5 \times 2 \times 6 = 60 = 6 \times 2 \times 5$

$5 \times 2 \times 6 = 60$        $5 \times 2 \times 6 = 60$   
 $= 10 \times 6 = 60$        $= 5 \times 12 = 60$   
 $= 6 \times 20 = 60$        $= 2 \times 30 = 60$