

Division

Year 1

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

12 divided equally into 3 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 group divide

Year 2

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

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

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

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

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

How many 3s in twelve?

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...

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

$24 \overline{) 2427}$
 $19416 \overline{) 72810}$
 $92226 \overline{) 33391000}$

$3339 \div 24 = 139 \text{ r } 3 = 139 \frac{3}{24}$
 $= 139.13 \text{ (to 2dp)}$

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

10×4 3×4

Year 5

$9423 \div 3$

1000s | 100s | 10s | 1s

divisor | dividend | quotient | remainder

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

$0576 \text{ r } 1$
 $6 \overline{) 3437}$

100s | 10s | 1s

300

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

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

$426 \div 3$

100s | 10s | 1s

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

The digit sum of multiples of 6 is 6, 12 or 18

All multiples of 6 are even numbers.

A number is divisible by 9 if the digit sum 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.

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.

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

All multiples of 12 are even numbers.

$12 \times 6 = 72$
 $72 \div 12 = 6$
 $72 \div 6 = 12$
 $6 \div 12 = 0.5$

$6 \times 12 = 72$
 $72 \div 6 = 12$
 $72 \div 12 = 6$
 $6 \div 72 = 0.083$

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

$5 \times 2 \times 6 = 60$
 $5 \times 12 = 60$
 $5 \times 2 \times 6 = 60$
 $5 \times 12 = 60$
 $5 \times 2 \times 6 = 60$
 $5 \times 12 = 60$