Maths

Four Operations

Y6

Knowledge

- Common factors
- Common multiples
- Primes
- Squares and cubes
- Order of operations

Skills

- Add and subtract whole numbers
- Multiply up to a 4-digit number by a 1-digit
- Short division
- Division using factors
- Long division
- Mental calculations and estimation
- Reason from known facts

Vocabulary

Multiply, multiples, factor, common, prime, square, cube, order of operations, BODMAS, divide, remainder, quotient, divisor, product, dividend

Prime Numbers

2 3 5 7 11 13 17
19 23 29 31 37 41
43 47 53 59 61 67
71 73 79 83 89 97

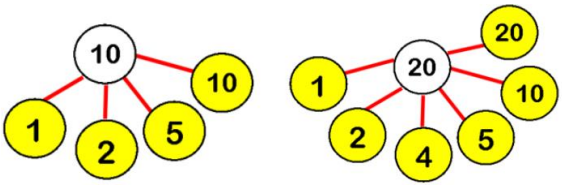
Prime numbers have factors of itself and 1.

Square and Cube Numbers

A square number is the product of a number being multiplied by itself.
E.g.
5 x 5 = 25
1, 2, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144

A cube number is the product of a number being multiplied by itself twice.
E.g.
3 x 3 x 3 = 9 x 3 = 27
1, 8, 27, 64, 125, 216, 343, 512, 729, 1000

Common Factors



The common factors of 10 and 20 are:
1, 2, 5, and 10.

These number appear in both numbers.

Common Multiples

Multiples of 3
3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54
Multiples of 4
4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72

The common multiples of 3 and 4 are: 12, 24, 36 and 48.

Order of Operations

B - brackets — 10 x (4 + 2) = 10 x 6 = 60
O - order — 5 + 4 = 5 + 2^2 = 9
D - division — 10 + 6 ÷ 2 = 10 + 3 = 13
M - multiplication — 10 - 4 x 2 = 10 - 8 = 2
A - addition — 10 x 4 + 7 = 40 + 7 = 47
S - subtraction — 10 ÷ 2 - 3 = 5 - 3 = 2

BODMAS helps you to remember the order of operations that you need to follow when answering a calculation.

Inspirational Mathematician

Dara O Briain (1972 – present)

Dara O Briain is a famous comedian and broadcaster who studied maths and theoretical physics at University College, Dublin. He host a gameshow called *School Of Hard Sums* which we will be taking some problems from to try and solve!