Substituting values into formulae

We use formulae for calculating lots of things such as cooking times, speed, density, perimeters and many more. Students should be able to substitute a range of values into different formulae. They should understand basic algebraic rules in order to do this fluently.

E.g. The perimeter of a rectangle is found by adding together all of the side lengths, it is given by the formula Perimeter = 2 x (Length + Width) or P = 2(L+W)

If the length of a rectangle is 3cm and the width of the same rectangle is 2cm, we can substitute these values into the formula to find the perimeter:

P = 2(L+W)

P = 2 (3 + 2)   ← Remember to use the order of operations (BIDMAS) for all calculations

P = 2 x (5)   ← Students need to understand that the 2 on the outside of the bracket means

multiply by 2

P = 10cm   ← Perimeter of the rectangle

Video: https://youtu.be/pkGJfwf_7q8?t=2m48s (Substituting)