C3 Quantitative: Learning Journey

What are we learning about?

In this topic we are going to look at quantitative chemistry – the calculations involved in chemistry. We will be learning about several different methods of calculating amounts of substances in a reaction.

Why are we learning about it?

It is a very important area of chemistry as it enables chemists to calculate known quantities of chemicals from reactions. This is particularly important in industries such as pharmaceuticals and medicines, food and drink production and even forensics.

What new **KNOWLEDGE** will I gain?

Several different calculations to calculate quantities of chemicals in a reaction. You will also be introduced to Avogadro's constant and the concept of the mole.

How does this build on the **KNOWLEDGE** I already have?

In KS3 you will have looked at conservation of mass and how mass is neither created or destroyed. This is the basis of quantitivate chemistry. You have also looked at a variety of different chemical reactions such as acids and alkalis and you will now use these as example reactions to calculate quantities of substances.

What new **SKILLS** will I develop?

There are a lot of maths skills in this topic, including simple multiplication, calculating percentages and rearranging equations. It will also involves some multiple step calculations. By the end of this topic you will have the skills to do all of them, helping you in science and in maths.

How does this build on the **SKILLS** I already have?

You can already use basic maths functions – this topic will allow you to use these with a scientific application.