## What are we learning about?

In this topic we are going to look at the structure of atoms, but also what can happen if these atoms are unstable. As part of this we will be investigating nuclear radiation, how it is measured, and the history of this branch of physics.



## Why are we learning about it?

Radiation is around us at all times, and this increases if you go for an x-ray, take a long-haul flight, or go on holiday to Cornwall! It is vital that we understand the risks or this, how we can protect ourselves, and get a grasp on one of science's fundamental concepts



# What new KNOWLEDGE will I

#### gain?

Structure and notation of atoms, alpha beta and gamma radiation, half life, nuclear equations, history of the atom, irradiation and contamination.





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

You probably research things every day by typing stuff into google, but how can you do it more usefully? Also, you have to revise for topics all the time and will no doubt have techniques that work for you — these will be very useful in this topic!



# What new **SKILLS** will I develop?

A large part of this topic is theory based, and using different techniques to enhance your memory will help with your revision. Research will form a crucial part of one of our lessons, and as a result we will talk about bias and peer review – crucial ideas in all three sciences.



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

In chemistry you have already come across the structure of the atom – we just delve into it a little deeper! You will also have come across terms such as isotope and ion, which we will define properly in this topic.