



A History of Particle Physics From GCSE to A level

Within your GCSE course we looked at the Nuclear Model of the atom which was supported by Ernest Rutherford's Scattering Experiment.

At GCSE we treated Protons and Neutrons as fundamental particles which exist at the centre of the atom and within the Nucleus.

As you move on to Alevel we will look at Protons and Neutrons not as fundamental particles but as being comprised of smaller constituents.

The standard model maps out our current understanding of the fundamental particles in Physics. This was hypothesised by theoretical Physicists and supported by Experimental Physicists.

Your Task is to write a **scientific article**, such as you would find in New Scientist or Physics World, that outlines the major discoveries, experiments and Physicists , that have led to our present understanding of the standard Model.

You should include:

- Thompson's discovery of the electron.
- Rutherford's discovery of the Proton.
- Chadwick's discovery of the Neutron.
- Dirac Proposal of Anti-matter.
- Discovery of Quarks.
- Discovery of the Neutrino.
- The Role of CERN in modern Particle Physics

Feel free to expand upon any aspect of Particle Physics that you find most interesting.

