
Task – produce a PowerPoint (or any info sheet or poster) covering the following topics

Topic – Atomic Structure Syllabus Ref: 3.2.1.1

Content:

Inside the Atom Proton number Nucleon Number

Specific Charge Isotopes

Learning Objective	Make some simple notes for your PowerPoint
Understand that an atom is made up of protons, neutrons and electrons	
Know the mass and charge of protons, neutrons and electrons in relative units.	
Know that the proton number, Z , is the number of protons	
Know that the nucleon number, A , is the total number of protons and neutrons.	
Be able to use nuclide notation.	
Know what specific charge means and how to calculate the specific charge of nuclei and ions	
Know that isotopes have the same proton number but different nucleon numbers	

<https://www.physicstutoronline.co.uk/alevelphysicsnotes/structure-of-the-atom-notes/>

Task – produce a PowerPoint (or any info sheet or poster) covering the following topics

Topic – Stable and Unstable Nuclei Syllabus Ref: 3.2.1.2

Content:

Forces in the nucleus Strong Nuclear Force Nuclear Decay

Learning Objective	Make some simple notes for your PowerPoint
Understand the role of the strong nuclear force in keeping the nucleus stable.	
Know how the strong nuclear force varies with nucleons separation.	
Understand that unstable nuclei can undergo alpha or beta decay	
Know the equations for alpha and beta-minus decay, including the need for the neutrino.	