CiE iGCSE Physics 0625 Learning Plan

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| **Section 22: The Nuclear Atom** |
| Specification | Resources | Assessment |
| **Core**• Describe the structure of an atom in terms of a positive nucleus and negative electrons * Describe the composition of the nucleus in terms of protons and neutrons
* State the charges of protons and neutrons
* Use the term proton number Z
* Use the term nucleon number A
* Use the term nuclide and use the nuclide notation A ZX
* Use and explain the term isotope

**Supplement*** Describe how the scattering of α-particles by thin metal foils provides evidence for the nuclear atom
* State the meaning of nuclear fission and nuclear fusion
* Balance equations involving nuclide notation
 | Video: Physics Section 4 – Atomic Physics – Lesson 1 – The Nuclear AtomPowerpoint: Physics 22 – The Atomic AtomTextbook Pages 250 - 251; Inside atomsPages 266 – 267; Atoms and particles (1)Pages 268 – 269; Atoms and particles (2)Section 22 checklist.doc | TextbookPage 251; Questions (1) to (5)Page 267; Questions (1) to (4)Page 269; Questions (1) to (5)Textbook answers: Page 331, Page 332Talking Paper video – Section 22 – The Nuclear atomSection 22 Exam Question - pdf Section 22 Exam Question mark scheme - pdf  |

Videos – www.igcsesciencecourses.com

Textbook Ref: Complete Physics for Cambridge iGCSE (Stephen Pople) - OUP

DVD Assessments – see resource DVD in textbook.