



CC3 Atomic structure

Personal learning checklist | 1 of 1

GCSE Edexcel Combined Science | Chemistry Papers 1 and 2

Name _____ Class _____ Date _____

Tick one box for each statement. Red: need help. Amber: partly confident.
Green: can do independently.

I can	Red	Amber	Green
Atomic models			
Describe how evidence changed Dalton's atomic model through the discovery of subatomic particles.	☐	☐	☐
Explain alpha-scattering evidence for a mostly empty atom with a small dense positive nucleus.	☐	☐	☐
Compare atomic and nuclear scale and evaluate simplified atomic drawings.	☐	☐	☐
Particles and numbers			
Compare proton, neutron and electron locations, relative charges and masses.	☐	☐	☐
Explain neutral atoms and distinguish atomic number from mass number.	☐	☐	☐
Calculate proton, neutron and electron numbers from atomic notation.	☐	☐	☐
Explain ion formation and calculate electron counts without changing element identity.	☐	☐	☐
Isotopes			
Explain isotopes using proton and neutron counts and distinguish them from ions.	☐	☐	☐
Explain similar chemical behaviour and possible physical differences between isotopes.	☐	☐	☐
Relative atomic mass			
Define relative atomic mass and explain why it need not be a whole number.	☐	☐	☐
Calculate weighted relative atomic masses using percentage or ratio abundances (Higher).	☐	☐	☐
Check calculated isotope averages against their masses and the more abundant isotope (Higher).	☐	☐	☐

My next revision priority _____