

C2 Topic 1 Atomic structure

Atomic structure recap	
1. What is a proton?	A subatomic particle found in the nucleus, it has a positive charge
2. What is a neutron?	A subatomic particle found in the nucleus, it has no charge
3. What is an electron?	A subatomic particle found in the nucleus, it has a negative charge
4. What is the charge of a proton?	Positive (+1)
5. What is the charge of a neutron?	No charge (0)
6. What is the charge of an electron?	Negative (-1)
Atomic number, mass number and relative masses of sub-atomic particles	
7. What is atomic number?	The number of protons in an atom
8. What is mass number?	The combined number of protons and neutrons in an atom
9. What is the relative mass of a proton?	1
10. What is the relative mass of an electron?	0
11. What is the relative mass of a neutron?	1
Isotopes	
12. What is an isotope?	Atoms of an element with the same number of protons but a different number of neutrons
13. Which number is the same for different isotopes of an element?	The atomic number
14. Which number is different for different isotopes of an element?	The mass number
15. What is relative atomic mass?	The mass of an atom compared to a twelfth of the mass of a carbon atom
Formula mass and the mole	
16. What is relative formula mass?	The combined relative atomic masses of all the atoms in a compound
17. What is a mole (of substance)?	The number of particles in a substance- 1 mole of any substance contains 6×10^{23} particles
18. What is the relative formula mass of H ₂ O?	18
19. What is the relative formula mass of CO ₂ ?	44
20. What is the relative formula mass of NH ₃ ?	17
21. What is the relative formula mass of CaCO ₃ ?	100