GCSE Chemistry Learning Checklist

Unit 1: Section 1: Atomic Structure

I can...		After Lesson	After Revision
1	state that everything is made of atoms and recall what they are		
2	describe what elements and compounds are		
3	state that elements and compounds are represented by symbols; and use chemical symbols and formulae to represent elements and compounds		
4	write word equations and balanced symbol equations for chemical reactions, including using appropriate state symbols		
5	**HT ONLY**: write balanced half equations and ionic equations		
6	describe what a mixture is		
7	name and describe the physical processes used to separate mixtures and suggest suitable separation techniques		
8	describe how the atomic model has changed over time due to new experimental evidence		
9	describe the difference between the plum pudding model of the atom and the nuclear model of the atom		
10	state the relative charge of protons, neutrons and electrons and describe the overall charge of an atom		
11	state the relative charge of protons, neutrons and electrons and describe the overall charge of an atom		
12	state the relative masses of protons, neutrons and electrons and describe the distribution of mass in an atom		
13	calculate the number of protons, neutrons and electrons in an atom when given its atomic number and mass number		
14	define the term relative atomic mass and why it takes into account the abundance of isotopes of the element		
15	calculate the relative atomic mass of an element given the percentage abundance of its isotopes		
16	describe how electrons fill energy levels in atoms, and represent the electron structure of elements using diagrams and numbers		

Keywords:

Mass number	Element	Electronic configuration
Atomic number	Compound	Plum pudding model
Proton	Relative mass	Chromatography
Electron	Mixtures	Crystallisation
Neutron	Shells	Distillation
Subatomic particles	Isotopes	Filtration

Exam insights:

Neutron number is calculated by subtracting the atomic number from the mass number.

When defining an isotopes, you need to include protons and neutrons in your answer.