C2 Topic 1 Revision tracker

CHEMISTRY

Learning objectives I can:	I can do this very well	I can do this quite well	I need to do more work on this
1.1 Explain how Mendeleev: **a** arranged the elements, known at that time, in a periodic table by using properties of these elements and their compounds			
b used his table to predict the existence and properties of some elements not then discovered			
1.2 Classify elements as metals or non-metals according to their position in the periodic table			
HSW 2 Describe the importance of creative thought in the development of hypotheses and theories			
1.3 Describe the structure of an atom as a nucleus containing protons and neutrons, surrounded by electrons in shells (energy levels)			
1.4 Demonstrate an understanding that the nucleus of an atom is very small compared to the overall size of the atom			
1.5 Describe atoms of a given element as having the same number of protons in the nucleus, where this number is unique to that element			
1.6 Recall the relative charge and relative mass of: **a** a proton			
b a neutron			
c an electron			
1.7 Demonstrate an understanding that atoms contain equal numbers of protons and electrons			
HSW 2 Describe how data is used by scientists to provide evidence that increases our scientific understanding			
1.8 Explain the meaning of the terms: **a** atomic number			
b mass number			
c relative atomic mass			
1.9 Describe the arrangement of elements in the periodic table such that: **a** elements are arranged in order of increasing atomic number, arranged in rows called periods			
b elements with similar properties are placed in the same vertical column, called groups			
H 1.10 Demonstrate an understanding that the existence of isotopes results in some relative atomic masses not being whole numbers			
H 1.11 Calculate the relative atomic mass of an element from the relative masses and abundances of its isotopes			
HSW 14 Describe how scientists share data and discuss new ideas, and how over time this process helps to reduce uncertainties and revise scientific theories			
1.12 Apply rules about the filling of electron shells (energy levels) to predict the electronic configurations of the first 20 elements in the periodic table, given the atomic numbers, as diagrams and in the form 2.8.1			
1.13 Describe the connection between the number of outer electrons and the position of an element in the periodic table			
HSW 11 Present information using scientific conventions and symbols			