

	Statement	Guidance
3.1.U1	The periodic table is arranged into four blocks associated with the four sub- levels—s, p, d, and	The group numbering scheme from group 1 to group 18, as recommended by IUPAC, should be used
3.1.U2	The periodic table consists of groups (vertical columns) and periods (horizontal rows)	
3.1.U3	The period number (<i>n</i>) is the outer energy level that is occupied by electrons	
3.1.U4	The number of the principal energy level and the number of the valence electrons in an atom can be deduced from its position on the periodic table	
3.1.U5	The periodic table shows the positions of metals, non-metals and metalloids.	The terms alkali metals, halogens, noble gases, transition metals, lanthanoids and actinoids should be known
3.2.U6	Vertical and horizontal trends in the periodic table exist for atomic radius, ionic radius, ionization energy, electron affinity and electronegativity.	Only examples of general trends across periods and down groups are required. For ionization energy the discontinuities in the increase across a period should be covered.
3.2.U7	Trends in metallic and non-metallic behaviour are due to the trends above.	
3.2.U8	Oxides change from basic through amphoteric to acidic across a period.	Group trends should include the treatment of the reactions of alkali metals with water, alkali metals with halogens and halogens with halide ions
13.1.U9	Transition elements have variable oxidation states, form complex ions with ligands, have coloured compounds, and display catalytic and magnetic properties.	
13.1.U10	Zn is not considered to be a transition element as it does not form ions with incomplete d-orbitals.	
13.1.U11	Transition elements show an oxidation state of +2 when the s-electrons are removed.	
13.2.U12	The d sub-level splits into two sets of orbitals of different energy in a complex ion.	
13.2.U13	Complexes of d-block elements are coloured, as light is absorbed when an electron is excited between the d-orbitals	
13.2.U14	The colour absorbed is complementary to the colour observed.	