

Edexcel BTEC Level 2 in Applied Science qualifications – Unit 1 page 30

The scope of **D1** should be limited to three chemicals, chosen by the tutor to reflect the interests of the learners or local industry. Uses are to be in relation to physical properties.

To achieve P3, learners could either complete tables, create posters, visual presentations or cards which describe the atomic structure of the first twenty elements. There should at least two examples of isotopes of elements included. Learners could be given the structures of some of the elements 1 to 20 and asked to work out the structures of some of the other elements from 1 to 20. To achieve M3, the relationship between the position of the group in the periodic table and the number of electrons in the outer shell should be established. The addition of another shell of electrons on moving from lithium to sodium to potassium to rubidium, and from fluorine to chlorine to bromine to iodine should be described. Learners should be able to explain the differences in reactivity of the alkali metals and of the halogens to their electronic structures in order to achieve **D2**.