NEXUS SPM CHEMISTRY *FORM 4 & 5*

Page **33** (Extra Practice)

eRevision
Supplementary Materials for
*NEXUS*

SASBADI

CHAPTER 2:   THE STRUCTURE OF THE ATOM

Extra Practice

Objective Questions

1   A mass spectrum of chlorine gas shows that the gas has two isotopes. 75.5 % of   the isotope is $^{35}_{17}Cl$.   The remaining 24.5 % is made up of another isotope

If the relative atomic mass of chlorine is 35.5, what is the other isotope?

A $^{38}_{17}Cl$

B $^{34}_{17}Cl$

C $^{36}_{17}Cl$

D $^{37}_{17}Cl$

2   What is the electronic configuration of the element $^{25}_{12}E$?

A   2.8.1

B   2.8.2

C   8.8

D   2.8.8.7

3   Which of the following nuclei are isotopes?

A $^{62}_{11}P$ $^{62}_{12}Q$ **B** $^{18}_{28}P$ $^{18}_{29}Q$

C $^{7}_{6}P$ $^{8}_{7}Q$ **D** $^{14}_{4}P$ $^{14}_{4}Q$
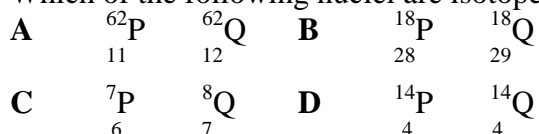
4   The table below shows the proton number of three elements.

Element	Proton number
P	3
Q	9
R	11

Which of the following statements about P, Q and R is correct?

A	R is a halogen.	
B	P will combine with Q to form a covalent compound.	
C	Q and R will combine to form a covalent compound.	
D	P and Q will combine to form an ionic compound.	

5   Which of the following shows an orderly increase in the periodic table?
   A   The increase in electron shells
   B   The increase in valence electrons
   C   The increase in the number of protons
   D   The increase in the number of neutrons