



1 Give the full electron configuration of the following atoms and ions.

a V atom ..... (1)

b  $V^{3+}$  ion ..... (1)

2 Explain why copper is classed as a transition metal. ....

.....

.....

..... (2)

3 Complete the table about the following complex ions.

Complex	$[AgCl_2]^-$	$[Cr(C_2O_4)_3]^{3-}$	$[Cu(H_2O)_6]^{2+}$
Sketch of shape			
Name of shape			
Bond angles			
Ligand			
Co-ordination number			
Oxidation state of metal			