Marks

- Complete the following table. Give, as required, the formula, the systematic name, the oxidation number of the underlined atom and, where indicated, the number of *d* electrons for the element in this oxidation state. **5**

Formula	Systematic name	Oxidation number	Number of *d* electrons
$\underline{C}O_2$			
$Na_2\underline{Cr}O_4$			
$\underline{Fe}Cl_3 \cdot 3H_2O$			
	potassium sulfate		

- Draw the Lewis structures, showing all valence electrons for the following species. **3**

CH_3^-	CH_3^+

Indicate which of these species you expect will be more stable and explain why.
