



1 Give the formula and structure type of the following substances. (8)

Name	Formula	Structure type				
		Monatomic	Molecular	Giant covalent	Ionic	metallic
potassium oxide	$K_2O$				✓	
diamond	$C$			✓		
oxygen	$O_2$		✓			
sodium	$Na$					✓
argon	$Ar$	✓				
ammonia	$NH_3$		✓			
magnesium hydroxide	$Mg(OH)_2$				✓	
chromium(III) nitrate	$Cr(NO_3)_3$				✓	

2 Draw stick and dot-cross diagrams for each of these molecules and ions. (6)

Molecule / ion	$NBr_3$	$SF_4$	$AlF_4^-$
Stick diagram			
Stick diagram			