**1.2.2 Exercise 7 – Strength of Intermolecular Forces**

1. Predict, with reasons, which of the following substances will have the higher boiling point:

a) methane and ethane

b) chlorine and bromine

c) neon and argon

d) nitrogen and oxygen

e) phosphorus (P4) and sulphur (S8)

f) Br2 and ICl

g) H2S and H2O

h) HF and HCl

2. State two unusual properties of water which result from hydrogen bonding.

3. Explain why ionic compounds often dissolve in water.