

- 2 Table 2.1 shows the melting points, boiling points and electrical conductivities of seven substances, **A, B, C, D, E, F** and **G**.

**Table 2.1**

substance	melting point /°C	boiling point /°C	electrical conductivity when solid	electrical conductivity when molten
<b>A</b>	1600	2230	poor	poor
<b>B</b>	-219	-183	poor	poor
<b>C</b>	770	1420	poor	good
<b>D</b>	-39	357	good	good
<b>E</b>	-7	58	poor	poor
<b>F</b>	44	280	poor	poor
<b>G</b>	1085	2562	good	good

(a) Identify which substance, **A, B, C, D, E, F** or **G**, is:

(i) a gas at 25°C

..... [1]

(ii) a solid consisting of simple molecules at 25°C

..... [1]

(iii) a metal which is liquid at 25°C.

..... [1]

(b) (i) Identify which substance, **A, B, C, D, E, F** or **G**, has a giant covalent structure.

Use the information in Table 2.1 to give **two** reasons for your choice.

substance .....

reason 1 .....

reason 2 .....

[3]

(ii) Identify which substance, **A, B, C, D, E, F** or **G**, is an ionic compound.

Use the information in Table 2.1 to give **one** reason for your choice.

substance .....

reason .....

[2]

[Total: 8]