

### Paper 3

Questions are applicable for both core and extended candidates

- 1 Table 5.1 shows the properties of four substances.

**Table 5.1**

substance	boiling point	electrical conductivity of solid	electrical conductivity when molten	density in g / cm <sup>3</sup>
aluminium	high	conducts	conducts	2.70
diamond				3.51
potassium bromide	high	does not conduct	conducts	2.75
sulfur	low	does not conduct		2.07

- (a) Complete Table 5.1 to show the electrical conductivity of solid diamond and molten sulfur. [2]
- (d) State the property of aluminium given in Table 5.1 which makes it suitable for the manufacture of aircraft.

..... [1]

## Paper 4

Questions are applicable for both core and extended candidates  
unless indicated in the question

2 Boron and aluminium are Group III elements.

(d) State **two** physical properties of aluminium that make it suitable for use in overhead electrical cables.

1 .....

2 .....

[2]