

3. Chemical bonding

3.2 Ionic bonding

Paper 1

Question Paper

- 1** The element tin exists in two forms, grey tin and white tin.

Some properties of grey tin and white tin are shown.

	grey tin	white tin
boiling point / K	2543	2533
electrical conductivity	none in solid or liquid	good in solid and liquid
malleability	brittle	malleable

Which structural change might take place when grey tin changes to white tin?

- A** giant covalent to giant ionic
 - B** giant covalent to giant metallic
 - C** giant ionic to giant covalent
 - D** giant ionic to giant metallic
- 2** Which solid has a simple molecular lattice?
- A** calcium fluoride
 - B** nickel
 - C** silicon(IV) oxide
 - D** sulfur