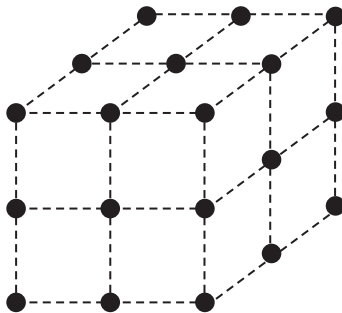


21 The diagram shows the arrangement of atoms in a particular crystal.



Each atom is at the corner of a cube.

The mass of each atom is 3.5×10^{-25} kg. The density of the crystal is 9.2×10^3 kg m⁻³.

What is the shortest distance between the centres of two adjacent atoms?

- A** 3.8×10^{-29} m
- B** 6.2×10^{-15} m
- C** 3.4×10^{-10} m
- D** 3.0×10^{-9} m

22 The diagram shows the arrangement of four particles, each of different mass, at the corners of a square.