

NCERT/CBSE CHEMISTRY CLASS 12 textbook

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Answers to NCERT/CBSE Chemistry (Class XII) textbook

1.21 Gold (atomic radius = 0.144 nm) crystallises in a face-centred unit cell. What is the length of a side of the cell?

$$r = \frac{a}{2\sqrt{2}}$$

$$a = 2\sqrt{2}r$$

$$a = 2\sqrt{2} \times 0.144 \text{ nm} = 0.407 \text{ nm}$$