

15 The escape speed of an oxygen molecule at the Earth's surface is $1.1 \times 10^4 \text{ m s}^{-1}$. What is the escape speed at $4R$ from the centre of the Earth, where R is the radius of the Earth?

A $5.5 \times 10^3 \text{ m s}^{-1}$

B $6.4 \times 10^3 \text{ m s}^{-1}$

C $1.1 \times 10^4 \text{ m s}^{-1}$

D $1.2 \times 10^4 \text{ m s}^{-1}$