

Additional Topic 3 answers

Topic 3 Thermal physics

3.2 Modelling a gas

- 1 **a** $1.0 \times 10^{-25} \text{ kg}$
b $8.4 \times 10^{28} \text{ m}^{-3}$
- 2 $2.41 \times 10^{-4} \text{ m}^3$
- 3 33 mol
- 4 $1.1 \times 10^{-5} \text{ m}^3$
- 5 by a factor of 8
- 6 **a** at B, 1200 K; at C, 600 K; at D, 150 K
b at B