17 A body travelling with a speed of $10\,\mathrm{m\,s^{-1}}$ has kinetic energy 1500 J.

If the speed of the body is increased to $40\,\mathrm{m\,s^{-1}}$, what is its new kinetic energy?

A 4500 J   **B** 6000 J   **C** 24 000 J   **D** 1 350 000 J

18 Which process does **not** require energy to be supplied?

A boiling

B evaporation

C freezing

D melting

19 1.5 m³ of water is mixed with 0.50 m³ of alcohol. The density of water is 1000 kg m⁻³ and the density of alcohol is 800 kg m⁻³.

What is the density of the mixture with volume 2.0 m³?

A 850 kg m⁻³   **B** 900 kg m⁻³   **C** 940 kg m⁻³   **D** 950 kg m⁻³

Space for working