

**3** A  $1.5\text{ V}$  cell supplies  $0.20\text{ A}$  to a lamp for seven hours before the lamp goes out.

What is a sensible estimate for the initial chemical energy content of the cell?

**A**  $1 \times 10^2\text{ J}$

**B**  $1 \times 10^4\text{ J}$

**C**  $1 \times 10^6\text{ J}$

**D**  $1 \times 10^8\text{ J}$

**4** Three of these quantities have the same unit