

- 19** An electric kettle contains 500 g of water at 15 °C. The heating element of the kettle is rated at 2.2 kW and the specific heat capacity of water is $4.2 \times 10^3 \text{ J kg}^{-1} \text{ K}^{-1}$.

What is the minimum time it takes to raise the temperature of the water to 100 °C?

- A** 22 s **B** 81 s **C** 95 s **D** $8.1 \times 10^4 \text{ s}$