

**10** A heater in an electric kettle has a power of 2400 W.

When the water in the kettle is boiling at a steady rate, the mass of water evaporated in 120 seconds is 0.106 kg.

What is the rate of loss of thermal energy to the surrounding during the boiling process?

Take latent heat of vaporisation of water to be  $2.26 \times 10^6 \text{ J kg}^{-1}$ .

**A** 400 W

**B** 4400 W

**C** 48000 W

**D** 53000 W

