3 **(a)** Define *specific latent heat*.

....

....

.... [2]

(b) The heater in an electric kettle has a power of 2.40 kW.
When the water in the kettle is boiling at a steady rate, the mass of water evaporated in 2.0 minutes is 106 g.
The specific latent heat of vaporisation of water is 2260 J g^{-1}.

Calculate the rate of loss of thermal energy to the surroundings of the kettle during the boiling process.

rate of loss = ... W [3]