**12** A kettle was used to heat 855 g of water to boiling point. The initial temperature of the water was 21.5 °C and it took 115 s to heat the water to 100 °C.

The kettle is left switched on for 175 s after the water has reached 100 °C.

Calculate the mass of water that was boiled away.

specific heat capacity of water = 4190 $J\,kg^{-1}\,K^{-1}$
specific latent heat of vaporisation of water = $2.26 \times 10^6$ $J\,kg^{-1}$

Mass of water that was boiled away = .....

**(Total for Question 12 = 4 marks)**


DO NOT WRITE IN THIS AREA