

- 2 In an experiment to determine the specific latent heat of vaporisation of water  $L_v$ , a student used an electrical heater to boil water in a beaker.

The experimental data gave  $L_v = 2.20 \text{ MJ kg}^{-1}$ . The textbook value of  $L_v$  is  $2.26 \text{ MJ kg}^{-1}$ .

Which of the following could be an explanation for this difference in the values of  $L_v$ ?

- ☐ A Some energy is transferred to the surroundings.
- ☐ B The heater power was underestimated.
- ☐ C The student did not stir the water.
- ☐ D The heater is inefficient.

(Total for Question 2 = 1 mark)