

- 11** An electric iron rated at 2600 W contains a steel plate which is heated to a working temperature of 215°C. Room temperature is 18°C.

Deduce whether the plate could reach its working temperature in less than 1 minute.

mass of steel plate = 890 g

specific heat capacity of steel = 450 J kg⁻¹ K⁻¹

(3)

(Total for Question 11 = 3 marks)