

- 11** An electrical heater is placed in an insulated container holding 100 g of ice at a temperature of $-14.0\text{ }^{\circ}\text{C}$. The heater supplies energy at a rate of 98 W. After 30 s, all the ice has reached a temperature of $0.0\text{ }^{\circ}\text{C}$.

What is the specific heat capacity of ice?

- A** $900\text{ J kg}^{-1}\text{ K}^{-1}$
- B** $1200\text{ J kg}^{-1}\text{ K}^{-1}$
- C** $2100\text{ J kg}^{-1}\text{ K}^{-1}$
- D** $4200\text{ J kg}^{-1}\text{ K}^{-1}$