13 A glass beaker contains a mass of 0.20 kg of water at a temperature of 20 °C.

The specific heat capacity of water is 4200 J / (kg °C).

A brass block of mass 0.15 kg is at a temperature of 170 °C. The block is carefully lowered into the beaker of water.

The final temperature of both the water and brass is 30 °C.

What is the specific heat capacity of the brass?

(Assume that no water is lost and no thermal energy has been transferred to the beaker or the surroundings.)

A 400 J / (kg °C)

B 660 J / (kg °C)

C 1200 J / (kg °C)

D 5600 J / (kg °C)