15 Two identical blocks of copper, each of mass 0.20 kg, are at temperatures of 80 °C and 20 °C respectively. They are placed in thermal contact in an insulated container.

The specific heat capacity of copper is 390 J kg^{-1} K^{-1}.

What is the amount of heat lost by the block that was initially at a higher temperature when thermal equilibrium is reached?

A 2300 J

B 4700 J

C 7000 J

D 12000 J

16 The root-mean-square speed of molecules of an ideal gas which is at an initial temperature