

**Answer on question #57507,57554, Physics / Other**

**Question** A 15.75-g piece of iron absorbs 1086.75 joules of heat energy, and its temperature changes from 25C to 75C. Calculate the specific heat capacity of iron.

**Solution** Specific heat is

$$c = \frac{Q}{m\Delta T} = \frac{1086.75}{15.75(75 - 25)} \approx 1380 \text{ J/kg/K}$$