

## Calorimetry Practice Problem

A 1.60g sample of a metal that has the appearance of gold requires 5.8J of energy to change its temperature from 23.0 °C to 41.2 °C. Is the metal pure gold?

### **Specific Heat Capacities of Common Substances:**

<b>Substance</b>	<b>J/g °C</b>
Water (l)	4.184
Water (s)	2.03
Water (g)	2.0
Aluminum (s)	0.89
Iron (s)	0.45
Mercury (l)	0.14
Carbon (s)	0.71
Silver (s)	0.24
Gold (s)	0.13

4.184 Joules = 1 calorie