

Name _____

Heat

1. How many calories are needed to warm 20.0 g of water from 21°C to 56°C?
2. How many joules are released when 32 g of gold cools from 71°C to 24°C?
3. If 57 Joules of heat are added to an aluminum can with a mass of 17.1 grams, what is the temperature change?
4. An unknown metal is suspected to be gold. When 2.8 J of heat are added to 5.6 g of the metal, its temperature rises by 3.9 °C. Is this consistent with the metal being gold?
5. A piece of copper with a mass of 45 g absorbs 242 J. If its initial temperature is 47 °C, what is its final temperature?