

Name _____

Heat Problems

1. How much heat is required to heat 3.4 mol of aluminum from 250. K to 289 K?
2. How much heat is required to heat 75.2 g of gold from 293 K to 371 K?
3. If 43 kJ of heat are added to 65 mol of silver at 5^o C what will its final temperature be?
4. If 83 kJ of heat are added to 84 g of cobalt at 287 K, what will its final temperature be?

8. How many grams of octane (C_8H_{18}) would rise from $3^\circ C$ to $45^\circ C$ when 39.4 kJ of energy is added?
9. What will the final temperature of 5.4 mol of sodium chloride at $-5^\circ C$ heated by 2.1 kJ of energy?
10. What was the initial temperature of 120 g of iron that was heated with 2.1 kJ if its final temperature is 387 k?