

- 14** Iron has a specific heat capacity that is about four times that of gold. A cube of gold and a cube of iron, both of equal mass and at  $20^{\circ}\text{C}$ , are placed in two different styrofoam cups, each filled with 100 g of water at  $40^{\circ}\text{C}$ . Assume that the styrofoam cups have negligible heat capacities and that no heat is lost to the environment.

After thermal equilibrium has been attained, which of the following statements is correct?

- A** The temperature of the gold is lower than that of the iron.
- B** The temperature of the gold is higher than that of the iron.
- C** The temperatures of the water in the two cups are the same.
- D** There is insufficient information provided for comparison of the final temperatures of gold and iron.

**15** Which of the following is not a true statement?