

## Module 2 Quiz

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$$q = mc\Delta T$$
$$\rho = \frac{m}{V}$$

Name: \_\_\_\_\_

1. Ezra lights a candle and notices that it gives off light and heat — two different kinds of energy. What can we say about the burning candle? Choose all the correct answers: (5)
  - A. Ezra has created electromagnetic energy (light energy)
  - B. Ezra has converted chemical energy into electromagnetic energy
  - C. Ezra has created thermal energy
  - D. Ezra has converted chemical energy into thermal energy
  - E. Ezra has too much time on his hands
2. Cu (copper) has a specific heat of  $0.3851 \frac{J}{g \cdot ^\circ C}$ . How much heat is required to increase the temperature of  $1.00g$  of Cu from  $50.00^\circ C$  to  $60.00^\circ C$ ? Answer with correct significant figures. (5)
3. Convert the following measurements:
  - (a) how many seconds in  $1\mu s$ ? (1)
  - (b) how many kilograms in 1,000,000 grams? (1)
  - (c) how many centimeters in 375 meters? (1)

This exam has 3 questions for a total of 13 points.