

## Chapter 10 Thermal Energy Test

### Multiple Choice

Directions: Choose the best answer for each question.

1. Temperature is a measure of the \_\_\_\_\_ of molecular motion.  
a. mass  
b. average kinetic energy  
c. potential energy  
d. thermal energy
2. The structure and forces between \_\_\_\_\_ molecules  
a. gases  
b. liquids  
c. solids  
d. crystals
3. Heat is the  
a. amount of thermal energy in an object  
b. difference between the kinetic and potential energy  
c. energy of heat motion  
d. transfer of energy between two objects
4. A gas in a cylinder gets hot by contact of \_\_\_\_\_  
a. molecules  
b. particles  
c. crystals  
d. molecules
5. Which is a higher quality material than glass? (Heat conduction) \_\_\_\_\_  
a. metal  
b. plastic  
c. wood  
d. stone

### Completion

Complete each sentence.

1. The lower quality material is \_\_\_\_\_ (gold, iron, copper).
2. Kinetic energy is the energy of \_\_\_\_\_ (motion, vibration, rotation).
3. Kinetic energy is the energy of \_\_\_\_\_ (motion, vibration, rotation).
4. When you get your hand hot in a microwave oven, it really means it has received heat that has traveled over \_\_\_\_\_ (microwaves, radio waves).
5. If you add 100 cal of water at 10°C to 100 cal of water at 20°C, the average kinetic energy of the water \_\_\_\_\_ (increases, decreases, remains the same).
6. When 100 cal of water at 20°C is added to 100 cal of water at 10°C, the thermal energy \_\_\_\_\_ (increases, decreases, remains the same).
7. Temperature is a measure of the average kinetic energy of the \_\_\_\_\_ (molecules, particles, atoms).