

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 direction of heat transfer depends _____ on temperature.
a. never
b. always
c. being
d. rarely
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 from one object to another
4. A gas in a cylinder gets hot by expansion of _____
a. molecules
b. molecules
c. volume
d. molecules
5. Which has a higher specific heat capacity: water or oil? _____ than oil.
a. heating faster
b. heating slowly
c. variable heat
d. about the same

Completion

Complete each sentence.

1. The lower specific heat capacity is _____ (oil, water, copper).
2. Kinetic energy is the energy of motion. _____ (thermal energy, potential energy, heat)
3. Kinetic energy is the energy of motion. _____ (heat, work, force, energy, or potential energy)
4. When you get your hand hot in a microwave oven, it really means it has received heat that has traveled over _____ (radiation, reflection, conduction).
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, is the same as before).
7. Temperature is a measure of the average kinetic energy of the _____ (heat, potential energy, kinetic energy, or the particles in an object).