**CH 6 QUIZ**

**Modified True/False**

*Indicate whether the statement is true or false. If false, change the identified word or phrase to make the statement true.*

\_\_\_\_ 1. Thermostats transform potential energy into kinetic energy. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 2. A refrigerator changes thermal energy. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 3. A heat engine is an extremely efficient machine. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 4. When two containers at the same temperature are brought together, no heat is transferred. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 5. If you put your hand above a burner on a stove, your hand becomes hotter than if you put your hand beside the burner. The heat is transferred to your hand above the burner by radiation. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 6. Radiation transfers energy by moving matter. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 7. Air is a good conductor of heat. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 8. Compared to water, most metals have low specific heats. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 9. Fans moving hot air is an example of forced convection. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 10. When you hold a ball above ground it has kinetic energy. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 11. When a substance is cooled it usually expands. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Completion**

*Complete each statement.*

1. Objects that are at the same temperature can have different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. A material with low specific heat is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A material with high specific heat is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3. Hot-air balloons typically fly in the early morning and late evening. This is because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. A toaster has a temperature regulator called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. Refrigerators work by transferring \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ out of the refrigerator and into the coolant.

6. Heat always moves from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ objects to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ objects.

7. In the winter, rooms are often hotter near the ceiling than on the floor because hot air is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than cold air.

8. A good \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ transfers heat easily.

9. The amount of heat required to raise the temperature of 1 kg of a substance by 1°C is its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

10. In an automobile engine, the fuel burns in a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ inside the engine.

**Matching**

*Match each example with the type of thermal energy transfer.*

|  |  |  |  |
| --- | --- | --- | --- |
| a. | conduction | c. | radiation |
| b. | convection |

\_\_\_\_ 1. ceiling fan cools a room by moving the air

\_\_\_\_ 2. circulation of water in Earth’s oceans

\_\_\_\_ 3. warming by a fire on a cold night

\_\_\_\_ 4. heating water by putting hot stones in it

*Match each example with the device listed.*

|  |  |  |  |
| --- | --- | --- | --- |
| a. | heat engine | c. | refrigerator |
| b. | heating appliance | d. | thermostat |

\_\_\_\_ 5. keeps food cool

\_\_\_\_ 6. drives a steam locomotive

\_\_\_\_ 7. device that keeps a toaster from overheating

\_\_\_\_ 8. used to iron clothes

\_\_\_\_ 9. runs an automobile

\_\_\_\_ 10. cools a house in the summer