Name \_\_\_\_\_\_ Date\_\_\_\_\_

**Directions:** Beginning on page 164, <u>read</u> and complete the following questions.

## Section 2: Transferring Thermal Energy

- 1. Define conduction.
- Complete this statement: Thermal energy is transferred \_\_\_\_\_\_, not by movement of matter.
- 3. Why does heat move faster by conduction in solid than in gases?
- 4. What are the best conductors of heat?
- 5. Define convection.
- 6. Describe convection current.
- 7. Define radiation.
- 8. What is radiant energy?
- 9. Define insulator.

10. Provide an example of a good insulator and a poor insulator.

## Check you understanding.

**Directions:** Identify each of the statements as true or false. If identified as false, change the statement to make it true.

- \_\_\_\_\_1. The metal handle on a pan gets hot because of convection.
- \_\_\_\_\_2. Particles of matter are in constant random motion.
- \_\_\_\_\_3. The down feathers stuffed inside of a coat are good conductors of heat.
- \_\_\_\_\_4. As particles heat up, they move faster and spread apart.
- \_\_\_\_\_5. A metal can that sets in the sun gets hot because of conduction.
- \_\_\_\_\_6. A good insulator is also a good conductor of heat and energy.
- \_\_\_\_\_7. The end of a curling iron gets hot because of radiant heat energy.

