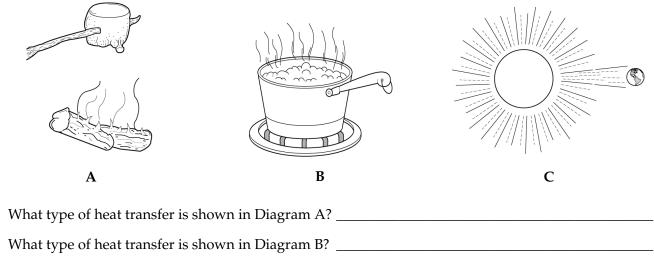
1.

2.

## **Heat Test**

**Interpreting Diagrams** Use the diagrams to complete the following.



3. What type of heat transfer is shown in Diagram C? \_\_\_\_\_\_

## Multiple Choice Write the letter of the term or phrase that best completes each statement.

 1. Heat makes particles of matter move
<b>a.</b> faster. <b>b.</b> slower. <b>c.</b> down. <b>d.</b> sideways.
 2. Heat and temperature are
<b>a.</b> related. <b>b.</b> the same. <b>c.</b> opposites. <b>d.</b> energy.
 <ul><li>3. The melting point of ice is</li><li>a. 100°C.</li><li>b. the same as the boiling point.</li></ul>
<ul><li>a. 100°C.</li><li>b. the same as the boiling point.</li><li>d. 212°F.</li></ul>
 4. Most metals are
<ul><li>a. good conductors.</li><li>b. poor conductors.</li><li>c. good insulators.</li><li>d. neither conductors nor insulators.</li></ul>
 <ul><li>5. As the particles of a substance move apart, the volume of the substance</li><li>a. remains the same.</li><li>b. increases.</li><li>c. decreases.</li><li>d. neither increases nor decreases.</li></ul>
 <ul> <li>6. The boiling point of every liquid is</li> <li>a. 100°C. b. the same. c. different. d. 212°F.</li> </ul>
 7. A calorie is a unit of
<b>a.</b> sound. <b>b.</b> heat. <b>c.</b> temperature. <b>d.</b> radiation.
 8. Convection takes place in
<b>a.</b> solids only. <b>b.</b> gases only. <b>c.</b> liquids only. <b>d.</b> gases and liquids.

## Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

## Heat Test (continued)

9.	Transfer of heat through a solid is called <b>a.</b> convection. <b>b.</b> conduction. <b>c.</b> radiation. <b>d.</b> solar heating.
10.	The amount of heat needed to raise the temperature of 1 g of water 1°C is called a <b>a.</b> unit. <b>b.</b> calorie. <b>c.</b> conduction. <b>d.</b> degree.
11.	Moving particles of matter have <b>a.</b> potential energy. <b>b.</b> kinetic energy. <b>c.</b> no energy. <b>d.</b> electrical energy.
12.	The temperature at which a liquid changes to a solid is <b>a.</b> 0°C. <b>b.</b> 100°C. <b>c.</b> its freezing point. <b>d.</b> its boiling point.
13.	The specific heat of water is <b>a.</b> higher than most other materials. <b>b.</b> lower than most other materials. <b>c.</b> measured in foot-meters. <b>d.</b> a measure of its conducting capacity.
14.	Absolute zero is <b>a.</b> about –273°C. <b>b.</b> about 0°C. <b>c.</b> about 100°C. <b>d.</b> about 273°C.
15.	Heat from the Sun reaches Earth by the process of <b>a.</b> convection. <b>b.</b> conduction. <b>c.</b> radiation. <b>d.</b> insulation.
Written Res	<b>ponse</b> Answer the following questions in complete sentences.

16. **INFER:** Why might it be especially difficult for scientists to cool a substance all the way down to absolute zero? \_\_\_\_\_

17. EXPLAIN: Why might it be important to know the specific heat of a substance?