

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

### **Thermal Energy QUIZ**

**Directions:**

Choose a word or words from the Word Bank that best complete(s) each statement. You will not use all the words in the Word Bank.

| <b><u>WORD BANK</u></b> |            |                 |      |             |
|-------------------------|------------|-----------------|------|-------------|
| increased               | decreased  | atoms/molecules | heat | temperature |
| celebration             | conduction | slow            | time | speed       |

1. Thermal energy is heat caused by the movement of \_\_\_\_\_.
2. \_\_\_\_\_ measures the thermal energy of an object.
3. Conduction is the passing of \_\_\_\_\_ through a material.
4. An object's thermal energy can be \_\_\_\_\_ by heating.

**Directions:**

Circle the best answer for each question. Answer short answer completely.

5. People wear hats when outside in the winter. How do hats help people stay warm?
  - A. Hats stop thermal energy from leaving their heads.
  - B. Hats slow down the thermal energy leaving their heads.
  - C. Hats stop cold from entering their bodies through their heads.
6. Dominick uses a toaster. He puts his hand on the outside of the toaster. The outside of the toaster feels hot. What is true about the toaster?
  - A. The material on the outside of the toaster is magnetic.
  - B. The material on the outside of the toaster is a conductor of heat.
  - C. The material on the outside of the toaster is an insulator.

7. A pot of water has a temperature of 25°Celsius. It is placed on a hot stove having a temperature of 120° Celsius. While the temperature of the room is 20 ° Celsius. Which best describes the transfer of thermal energy?

- A. stove → pot → air  
B. air → stove → pot  
C. stove → air → pot

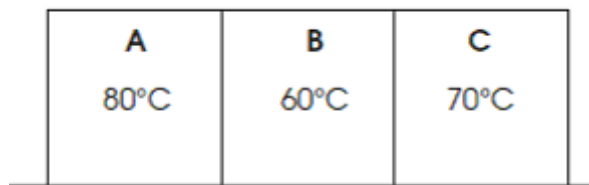
8. A student rubs two wooden sticks together very hard and fast. What effect will this rubbing have?

- A. The sticks will begin to melt  
B. The temperature of the sticks will increase  
C. The sound of the rubbing will become lower

9. A student has a glass of water. She takes an ice cube from the freezer. She puts the ice cube into the water. Which explains the change that happens?

- A. The ice cube melts because the cold flows out of the ice cube and into the water.  
B. The ice cube does not melt because cold flows into the ice cube from the water.  
C. The ice cube melts because thermal energy transfers to the ice cube from the water.

10. Three metal cubes are heated to the temperatures shown and placed touching on a non-conducting surface. Draw arrows to show the direction the thermal energy flows. Then explain why the thermal energy moves in this way. (2 points)



---

---

---