

## "Heat vs. Temperature" Worksheet

**FILL IN THE BLANKS** Complete each statement using a term or terms from the list below.  
Write your answers in the spaces provided. **Some words may be used more than once.**

less heat	degrees	not
lower temperature	related	the number of molecules
expand	higher temperature	more heat
how fast molecules vibrate	Joules	

1. Heat and temperature are \_\_\_\_\_ but they are \_\_\_\_\_ the same.
2. Temperature depends upon \_\_\_\_\_.
3. Heat depends on \_\_\_\_\_ and also on \_\_\_\_\_ that vibrate.
4. Faster vibrating molecules mean a \_\_\_\_\_.
5. Slower vibrating molecules mean a \_\_\_\_\_.
6. More vibrating molecules usually mean \_\_\_\_\_.
7. Fewer vibrating molecules usually mean \_\_\_\_\_.
8. Temperature is measured in units called \_\_\_\_\_.
9. Heat is measured in units called \_\_\_\_\_.
10. Heat makes matter \_\_\_\_\_.

### TRUE OR FALSE

Write "true" if the sentence is true. Write "false" if the sentence is false.

- \_\_\_\_\_ 1. Heat comes from vibrating molecules only.
- \_\_\_\_\_ 2. Molecules always vibrate at the same speed.
- \_\_\_\_\_ 3. The faster molecules vibrate, the less heat they give off.
- \_\_\_\_\_ 4. Temperature measures the average kinetic energy per molecule.
- \_\_\_\_\_ 5. Temperature is measured in calories.
- \_\_\_\_\_ 6. We measure temperature with a barometer.
- \_\_\_\_\_ 7. Heat depends only on how fast molecules vibrate.
- \_\_\_\_\_ 8. An ice cube has energy.
- \_\_\_\_\_ 9. An ice cube has the same amount of energy as a block of ice.
- \_\_\_\_\_ 10. Heat energy is measured in Joules.