

# Molecules on the Move Worksheet

**Directions:** There's something that gets molecules in matter moving (or slows their movement) enough to cause changes in states of matter. That "something" is heat—or the absence of it! The state of matter depends on temperature. When temperatures go up or down enough, almost all matter will change.

Show that you understand how thermal energy causes changes in states of matter by writing an explanation of what happens to cause each of these events. Remember to include the change in state as well as a description of how the molecules move for each event.

1. The punch you poured in the ice cube trays last night is a supply of popsicles today.

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4. The big ice cubes you put in your water are now tiny.

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7. The wet sponge you left on the counter last night is dry this morning.

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2. You forgot to turn off the teakettle, and now the water is gone.

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5. The chicken soup has boiled for half an hour and it seems to have "shrunk."

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8. Your little brother is crying because his snowman is shrinking. \_\_\_\_\_

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3. The cold, hard butter you spread on your toast is now soft and runny. \_\_\_\_\_

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6. When you put the lid on the simmering soup, the inside of the lid gets all wet. \_\_\_\_\_

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9. Your mom hung your jeans outside on the clothesline, the temperature dropped below freezing, and your jeans are cold, hard, and stiff.

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