

## Chapter 4

Use with Section 1

## REINFORCEMENT

## ● Solids

Match the terms in Column II with the descriptions in Column I by writing the letter of the correct term in the blank at the left.

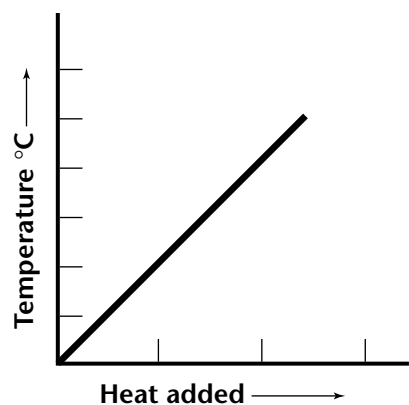
## Column I

- \_\_\_\_\_ 1. Dust seems to dance around in a beam of sunlight.
- \_\_\_\_\_ 2. Carbon monoxide is formed when one atom of oxygen combines with one atom of carbon.
- \_\_\_\_\_ 3. The molecules in a brick are in constant motion.
- \_\_\_\_\_ 4. Tar is hard to pour because it doesn't flow easily.
- \_\_\_\_\_ 5. All molecular motion would stop at  $-273.15^{\circ}\text{C}$ .
- \_\_\_\_\_ 6. Energy from hot cocoa melts a marshmallow placed in it.
- \_\_\_\_\_ 7. Like diamond, soot is made of carbon, but its atoms are arranged in a random manner.
- \_\_\_\_\_ 8. It takes 17.3 kJ of energy to melt a 100-gram beeswax candle at  $62^{\circ}\text{C}$ .
- \_\_\_\_\_ 9. The carbon atoms in graphite form clusters with a hexagon shape.
- \_\_\_\_\_ 10. Table salt changes to a liquid at  $808^{\circ}\text{C}$ .
- \_\_\_\_\_ 11. Aluminum atoms are arranged in a repeating cubic pattern.
- \_\_\_\_\_ 12. This sheet of paper is an arrangement of shaking particles.
- \_\_\_\_\_ 13. A thermometer indirectly measures the average kinetic energy of particles.
- \_\_\_\_\_ 14. Water changes to ice at  $0^{\circ}\text{C}$ .

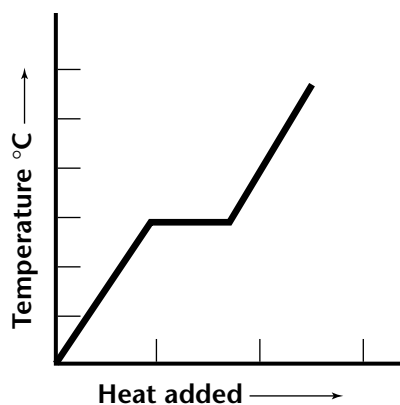
## Column II

- a. absolute zero
- b. amorphous solid
- c. Brownian motion
- d. crystalline solid
- e. freezing point
- f. heat
- g. heat of fusion
- h. kinetic theory of matter
- i. melting point
- j. molecule
- k. solid
- l. temperature
- m. unit cell
- n. viscosity

Use the graphs below to answer the question that follows.



Graph A



Graph B

15. Which graph shows the melting of a crystalline solid? Explain your reasoning.

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