

**18** A ball drops onto a horizontal surface and bounces elastically.

What happens to the kinetic energy of the ball during the very short time that it is in contact with the surface?

- A** Most of the kinetic energy is lost as heat and sound energy.
- B** The kinetic energy decreases to zero and then returns to its original value.
- C** The kinetic energy remains constant because it is an elastic collision.
- D** The kinetic energy remains constant in magnitude but changes direction.

**19** When the water in a pond freezes, it changes from a liquid to a solid. When this occurs, it