

## Chapter 17 practice

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) When vapor transforms to a plasma, energy must be \_\_\_\_\_  
A) released from the vapor. B) absorbed by the vapor.  
C) both of these D) neither of these
- 2) To increase the temperature of 50 grams of water by 2 Celsius degrees requires \_\_\_\_\_  
A) 0.04 calorie.  
B) 4.19 calories.  
C) 2 calories.  
D) 100 calories.  
E) 25 calories.
- 3) To melt ice, add \_\_\_\_\_  
A) time. B) temperature. C) force. D) energy.
- 4) The most responsible factor for whether a substance takes the phase of solid, liquid, gas, or plasma is its \_\_\_\_\_  
A) temperature. B) atomic shell configuration.  
C) composition. D) none of the above
- 5) A boy scout will be burned more severely by \_\_\_\_\_  
A) 100 g of steam at 100°C. B) 100 g of water at 100°C.  
C) both about equally D) neither of these
- 6) In a heat pump, warming is accomplished when \_\_\_\_\_  
A) condensation occurs in its coils. B) vaporization occurs in its coils.  
C) both of these D) neither of these
- 7) When water vapor changes phase to become water in a cloud, the surroundings become \_\_\_\_\_  
A) warmer. B) cooler.  
C) both of these D) neither of these
- 8) A canteen that is wet on the outside results in water inside that is \_\_\_\_\_  
A) warmer. B) cooler.  
C) both of these D) neither of these
- 9) If bits of the coals do not stick to your feet while walking barefoot on red-hot coals, it would be best if your feet are \_\_\_\_\_  
A) dry. B) wet. C) cold. D) very hot. E) warm.
- 10) When water freezes, the surrounding air is \_\_\_\_\_  
A) warmed. B) cooled.  
C) both of these D) neither of these

- 11) Rapid evaporation of hot water can lead to 11) \_\_\_\_\_  
A) the formation of ice. B) superheated steam.  
C) both of these D) neither of these
- 12) When moth balls sublime to gas they 12) \_\_\_\_\_  
A) release energy. B) absorb energy.  
C) both of these D) neither of these
- 13) Water can be brought to a boil by 13) \_\_\_\_\_  
A) applying heat. B) reducing air pressure on its surface.  
C) both of these D) neither of these
- 14) Stored potatoes, beets, and rutabagas in an unheated well-insulated room can be protected from freezing by having in the room 14) \_\_\_\_\_  
A) an ample supply of fire wood. B) blocks of foam plastic.  
C) large tubs of water. D) none of the above
- 15) Melting snow tends to 15) \_\_\_\_\_  
A) cool the surrounding air.  
B) warm the surrounding air.  
C) neither of these
- 16) As a block of ice at  $0^{\circ}\text{C}$  melts, the block absorbs energy 16) \_\_\_\_\_  
A) without a temperature change.  
B) and decreases in temperature.  
C) and increases in temperature.  
D) all of the above  
E) none of the above
- 17) Ice is put in a cooler to cool the contents. To speed up the cooling process, the ice can be 17) \_\_\_\_\_  
A) broken into smaller pieces.  
B) kept away from the food.  
C) drained of water periodically.  
D) wrapped in newspaper.  
E) none of the above
- 18) Which involves a larger number of calories? 18) \_\_\_\_\_  
A) the condensation of 1 gram of steam at  $100^{\circ}\text{C}$  to water at  $100^{\circ}\text{C}$   
B) the cooling of 1 gram of water at 100 degrees Celsius to 1 gram of ice at absolute zero  
C) both the same  
D) none of these

## Answer Key

Testname: CHAPTER 17 PRACTICE

- 1) B
- 2) D
- 3) D
- 4) A
- 5) A
- 6) A
- 7) A
- 8) B
- 9) B
- 10) A
- 11) A
- 12) A
- 13) C
- 14) C
- 15) A
- 16) A
- 17) A
- 18) A