

Name _____ Class _____ Date _____

_____ 13. The speed of a reaction can be increased by increasing reactant concentration or decreasing particle size.

_____ 14. An enzyme is a biological catalyst.

Part C Matching

Match each description in Column B to the correct term in Column A.

Column A

_____ 15. rate

_____ 16. collision theory

_____ 17. activation energy

_____ 18. transition state

_____ 19. catalyst

_____ 20. inhibitor

Column B

a. synonym for an activated complex

b. speed of a change that occurs over time

c. substance that interferes with the action of a catalyst

d. Particles can react to form products when they collide, provided they have enough kinetic energy.

e. substance that increases the rate of a reaction without being used up

f. minimum energy particles must have in order to react

Part D Questions and Problems

Answer the following question and solve the following problem in the space provided.

21. An ice machine can produce 120 kg of ice in 24 hours. Express the rate of ice production in kg/hr.

22. Which of the following will increase the rate of a reaction?

- a. increase particle size
- b. increase temperature
- c. decrease concentration
- d. add a catalyst