

Control the Reaction Rate of a Foaming Reaction

Name: _____

Date: _____

Student quiz — *Answer key*

Directions: Indicate the correct answer(s) for each question below.

1. Finish the sentence correctly. A catalyst...
 - a. Increases the number of collisions between reactant molecules.
 - b. Provides an alternative reaction pathway with a lower activation energy.
 - c. Changes the molecular structure of the reaction products.
 - d. Is destroyed during the reaction in order to lower the activation energy.

2. Finish the sentence correctly. Activation energy is...
 - a. The minimum energy required to cause a chemical reaction to occur.
 - b. The energy with which all molecular collisions occur.
 - c. The speed at which a reaction happens.
 - d. The energy generated by the breaking of bonds during a reaction.

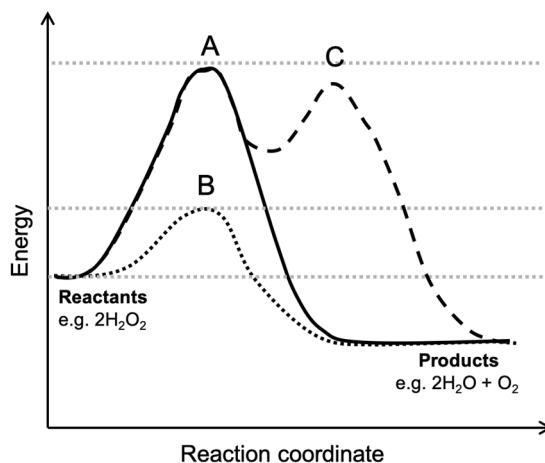
3. Why is an increase of reactant concentration directly proportional to the rate of the reaction?
 - a. The reactant molecules have a higher kinetic energy.
 - b. The activation energy decreases.
 - c. The number of successful reactant collisions increases.
 - d. All of the above.

4. How can you increase the rate of a chemical reaction?
 - a. By increasing the concentrations of the reactants.
 - b. By increasing the temperature of the reaction solution.
 - c. By adding a catalyst to the reaction.
 - d. By increasing the surface area of a solid reactant.
 - e. All of the above.

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Student quiz — *Answer key*

5. The graph below shows the energy diagram of a chemical reaction. Which curve(s) show(s) the reaction with an enzyme added?



- a. Curve A
- b. Curve B
- c. Curves A and C
- d. Curve C