



What ways do enzymatic catalysts increase the rates of reactions?

- A. They lower the activation energy of the reaction.
- B. They shift the reaction equilibrium toward the products.
- C. They increase the concentration of reactants.
- D. They decrease the free energy of the reaction.
- E. They promote the formation of a transition state.

Enzymatic catalysts, also known as enzymes, increase the rates of reactions by providing a specific active site for reactant molecules, called substrates, to bind to. The active site is tailored to fit the substrate perfectly, like a lock and key, and this allows the substrate to be oriented in the optimal position for the reaction to occur. This reduces the activation energy, the energy required to initiate the reaction, which in turn increases the rate of the reaction.

The correct option is answer A.