Marks 6

- Briefly describe two factors that determine whether a collision between two molecules will lead to a chemical reaction.

Briefly describe the relationship between the rate of a reaction and the activation energy for the reaction.

The rate constant for the decomposition of N_2O_5 increases from 1.50×10^{-5} s^{-1} at 27 °C to 3.80×10^{-3} s^{-1} at 57 °C. Calculate the activation energy for the reaction.

Answer: