

18.9: 18.8-Increasing the Rate of a Reaction

Aside from changing the concentrations of reactants or products which appear in the rate law, there are two main techniques by which reaction rates can be increased. As a rough rule of thumb, [raising the temperature](#) by an increment of 10 K usually increases the rate by a factor between 2 and 4. The effect of a [catalyst](#) can be even more striking. Certain highly efficient catalysts known as enzymes are capable of speeding up reactions to hundreds of thousands of times their normal rates. Both the effect of temperature and the effect of a catalyst are related to activation energy, and we shall consider each in turn.

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