Reaction mechanism

reaction = Σ Elementary steps

Molecularity Elementary step rate law

*uni*molecular $A \rightarrow \text{product}$ k[A]

*bi*molecular $A+B \rightarrow \text{product} \quad k[A][B]$

*ter*molecular $A+B+C \rightarrow \text{product } k[A][B][C]$

 $A+A+A \rightarrow \text{product } k[A]^3$

chemical reaction = sum of elementary steps

rate law and stoichiometry