

Kinetics Study Guide

Chapters 13

Collision Theory

- Frequency
- Orientation

Suggested Figures to Review

- 13.1
- 13.2
- 13.3
- 13.5
- 13.6
- 13.8
- 13.9
- 13.10
- 13.11
- 13.12
- 13.13
- 13.14
- 13.15
- 13.16
- 13.17
- 13.21

Rate Law

- Rate constant (k)
- Reaction order
- Overall order
- Integrated rate law
- Half life ($t_{1/2}$)
- Catalyst
- Enzyme
- Temperature
- Surface area

Reaction Profiles

- Activation energy (E_a)
- Activated complex (transition state)
- Endothermic
- Exothermic

Reaction Mechanisms

- Elementary step
- Reaction intermediates
- Unimolecular
- Bimolecular
- Termolecular
- Rate determining step