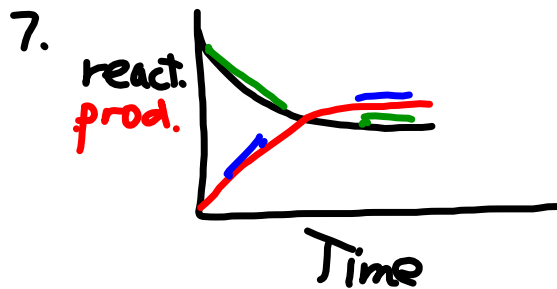
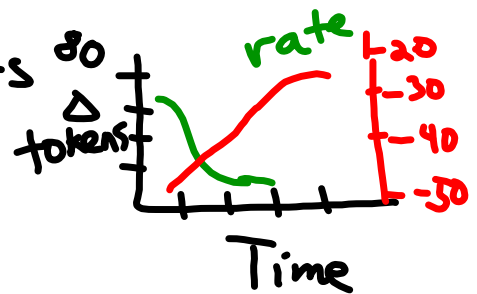


Rate of Reaction - Analogy

Calculations + Analysis

1. The number of reactants goes down.
2. The number of products goes up.
5. The rate of disappearance of reactants slows over time.
6. Same for products



Reaction Rate - Summary

Analogy - "Shaking" tokens = reaction

↓
collision is necessary to react.

→ 50% chance of collisions.

Real - very low success in collisions

Kinetic Molecular Theory Explains

Factors Affecting Reaction Rate

Also called collision theory.

- * all particles in random motion
- * Particles must collide to react.

1. Concentration- Higher [] \Rightarrow faster reaction

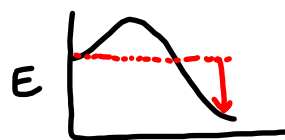


2. Surface Area- Higher s.A. = faster
 - More chance of collisions
 - For heterogeneous reactions

3. Nature of Reaction -
 - Reactants need a minimum amount of energy to react successfully.



* Exothermic + Endothermic



Loss of E

e.g. burning

$\Delta H = \text{negative}$



Gain of energy

e.g. growing

$\Delta H = \text{positive}$

Read text- p.471-477