

Notes: 3-6

Tuesday, March 06, 2007
6:10 PM

Last Time:

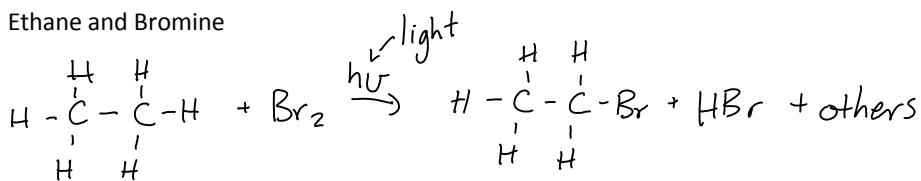
Cyclohexane Conformations
Optical Activity

Today:

Optical Activity
Free Radical Halogenation

Free Radical Reactions

- Ethane and Bromine



- Questions to Ask about a Reaction?

- Do the products form because they are most stable?
 - Do the products form because they are formed the quickest?
 - Do we get a mixture of products?

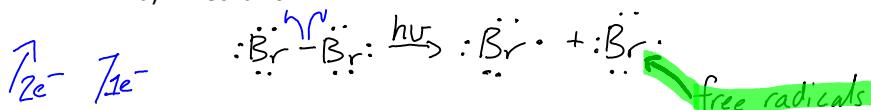
- Answers come from thermodynamics, kinetics, mechanism

- Free Radical Chain Reactions

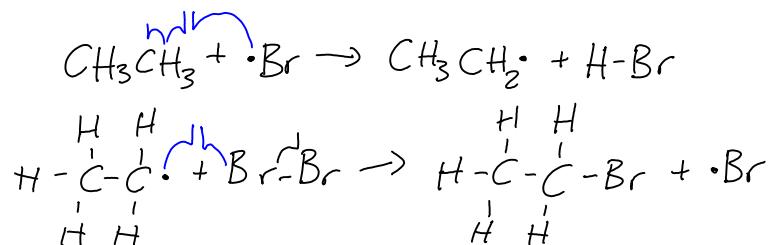
- All chain reactions have three steps

1. Initiation - radicals form from nonradical precursors (radical is something with lone electron)

- a) Mechanism:

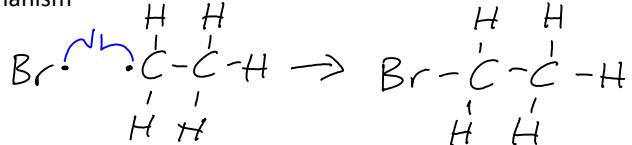


1. Propagation - radical reacts with stable molecule to give new radicals and a product
- a) Mechanism:



2. Termination - two free radicals come together to form nonradical product.

- a) Mechanism



- To control

- free radicals are present in low amount
 - Excess alkane