

Notes: 3-6

Tuesday, March 06, 2007

6:10 PM

Last Time:

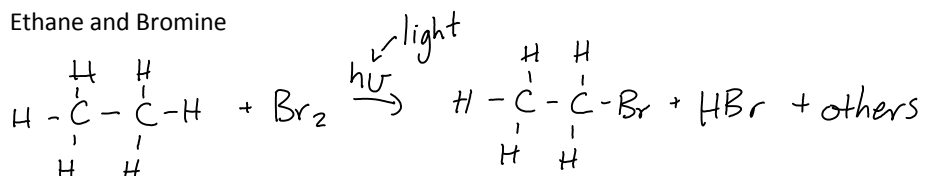
Cyclohexane Conformations
Optical Activity

Today:

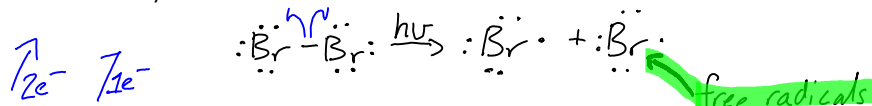
Optical Activity
Free Radical Halogenation

Free Radical Reactions

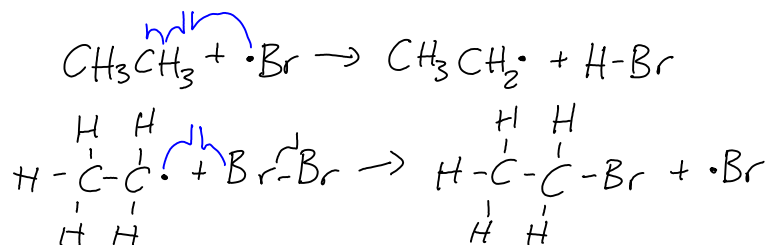
- Ethane and Bromine



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

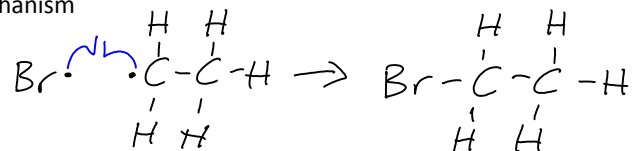


- Propagation - radical reacts with stable molecule to give new radicals and a product
- a) Mechanism:



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

a) Mechanism



- To control
 - free radicals are present in low amount
 - Excess alkane