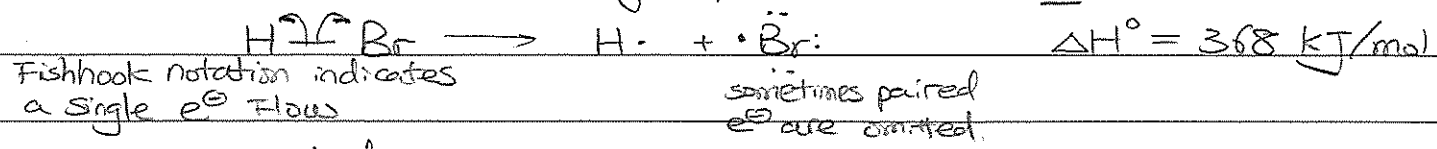


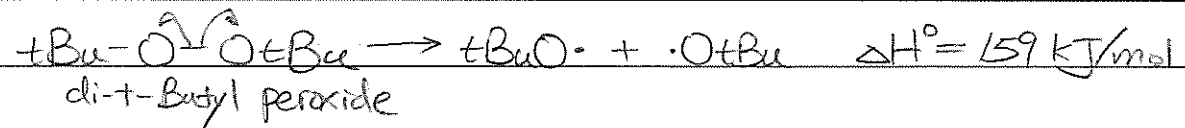
Sept 29 Free-Radical Rxn typically highly reaction

- R• Free radical (R-group is from Radical) Metal• are not radicals



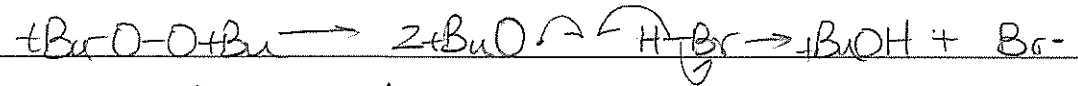
bond dissociation ΔH° (measures the intrinsic strength of a chemical bond)

For example:



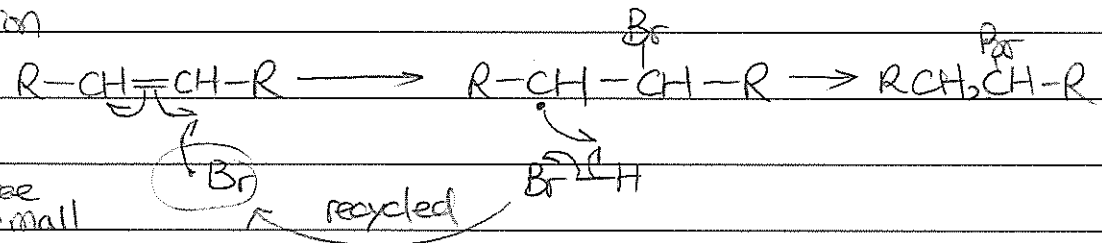
- Free-radical chain Rxn (3 steps) example in real world: Ozone destroyed by chlorofluorocarbons

① initiation



other commonly used free radical initiator: AIBN (p. 203)

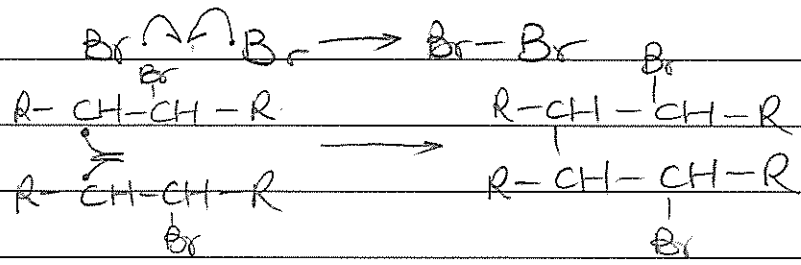
② propagation



→ a amount of free radicals is small
"cash" analogy

③ termination

probability increase when reactants are depleted



example: peroxide effects: in the presence of peroxide, HBr addition follows anti-Markovnikov's rule. Q: why?

radical stability order: $R-\dot{\text{C}}\text{H}_2 < R-\dot{\text{C}}\text{H}-R < R-\dot{\text{C}}-R$

"Hammond postulate" Br• Adds to less substituted carbon