

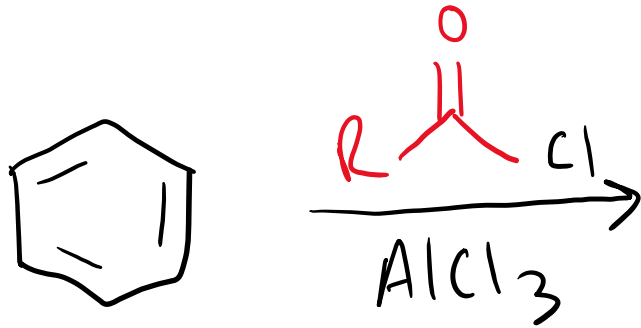
Friedel-Crafts Acylation

Substituted Benzenes and EAS

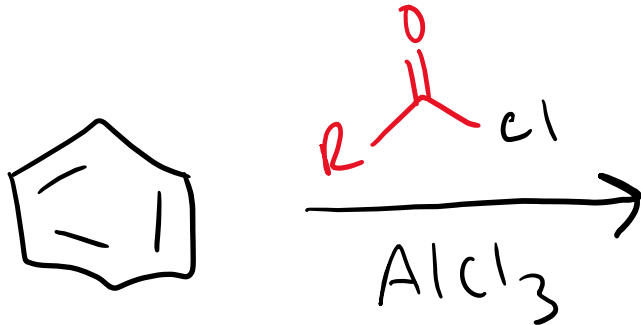
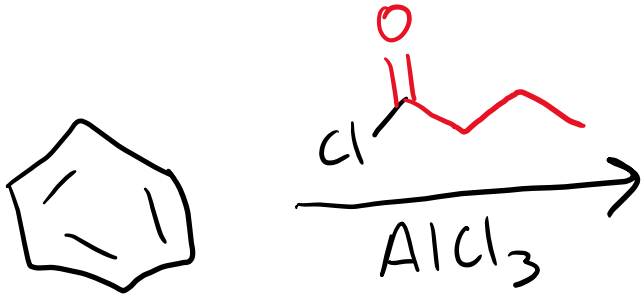
1/23/2023

Friedel-Crafts Acylation

Text: 18.6

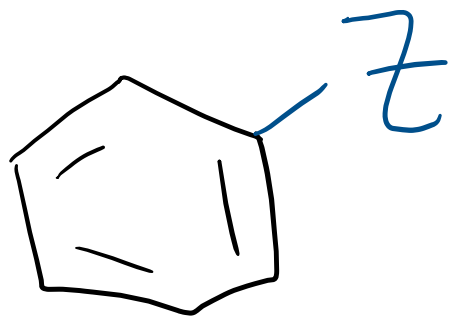


Friedel-Crafts Acylation: Differences vs. Alkylation



EAS with Substituted Benzenes

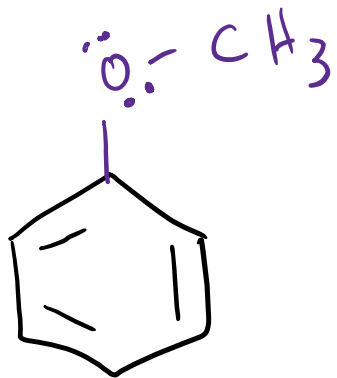
EAS reactions are more interesting when we use derivatives of benzene



BUT....reactivity changes significantly depending on the substituent!

Electron Donating Groups (EDG)

Text: 18.7



Common Electron Donating Groups:

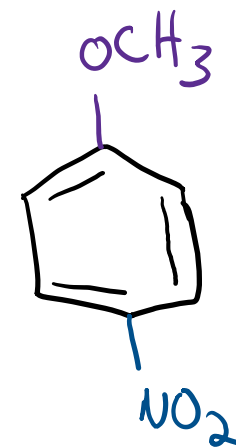
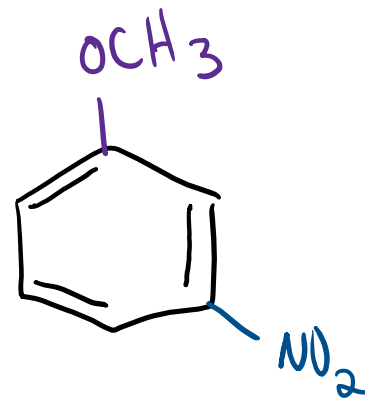
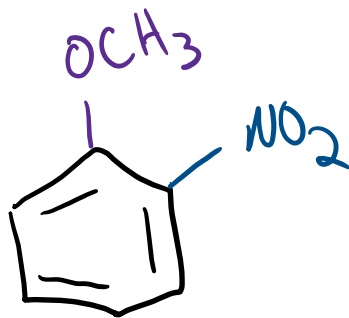
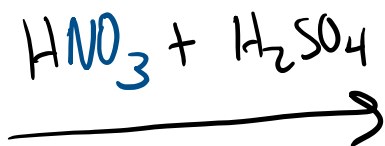
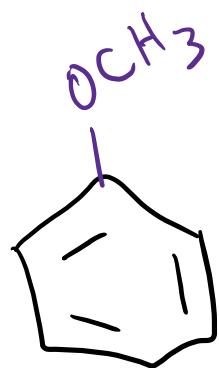
Electron **Withdrawing** Groups (**EWG**)

Text: 18.8

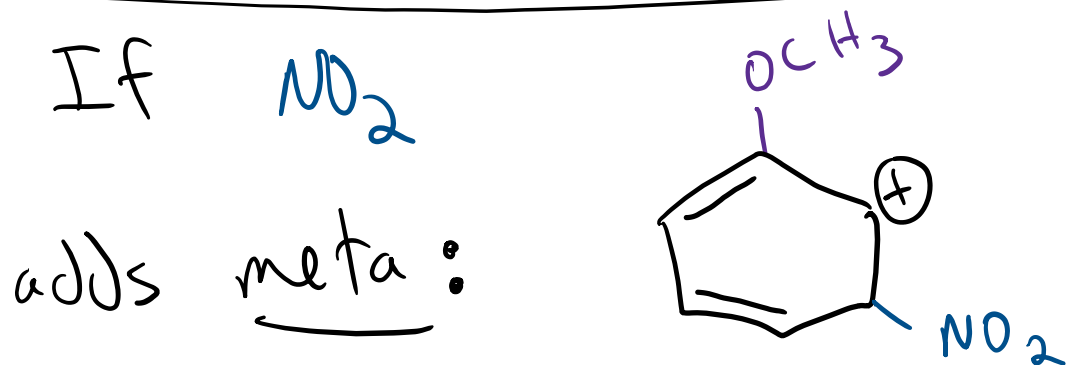
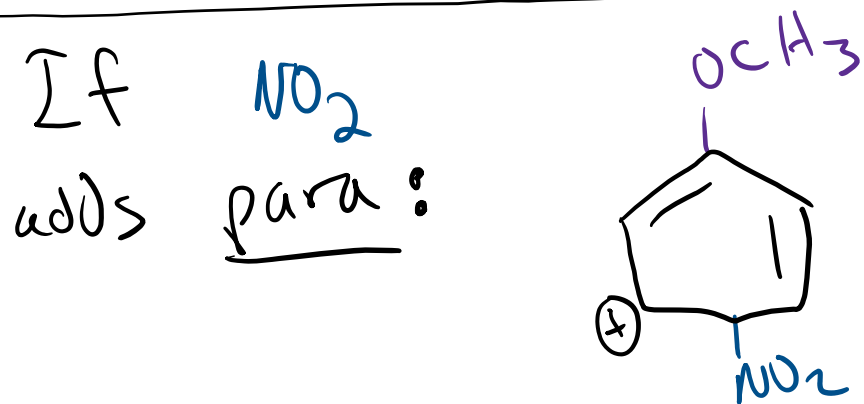
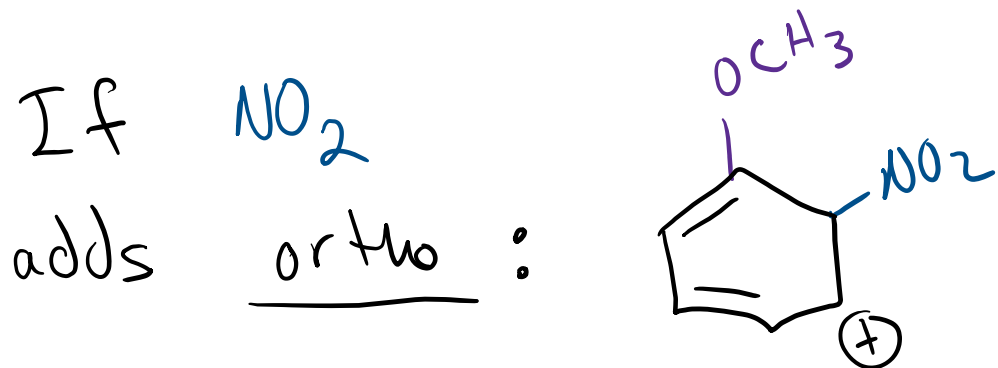


Common Electron Withdrawing Groups:

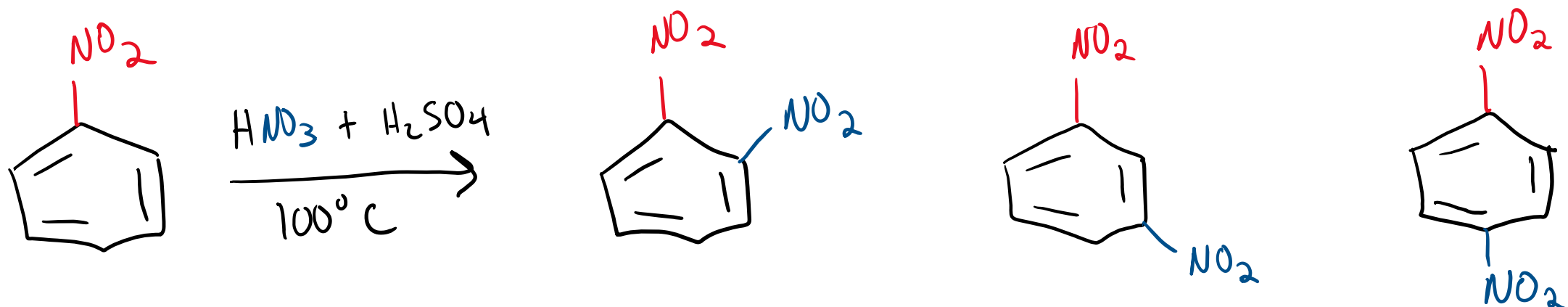
Electron **Donating** Groups: "Directing" EAS Regioselectivity



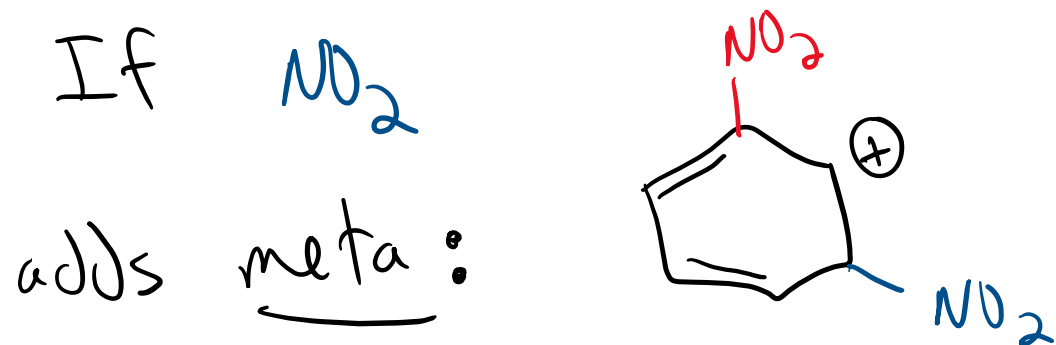
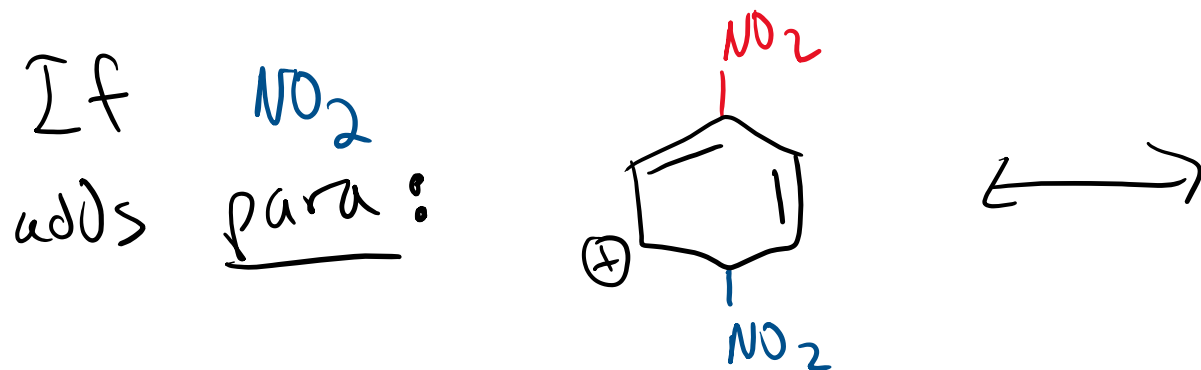
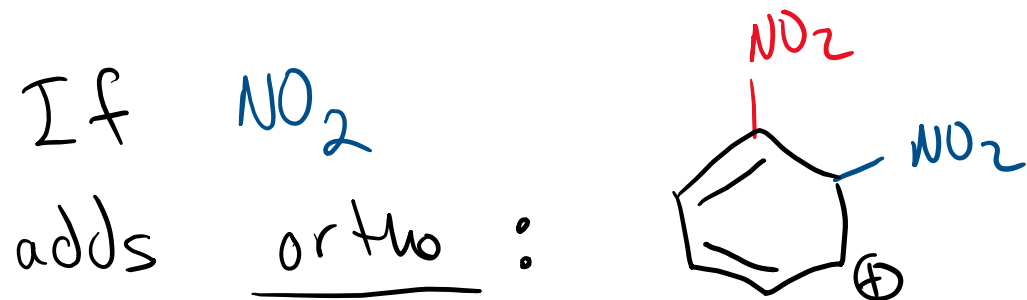
Electron **Donating** Groups: "Directing" EAS Regioselectivity



Electron **Withdrawing** Groups: "Directing" EAS Regioselectivity



Electron **Withdrawing** Groups: Directing EAS Regioselectivity



Halogens: Directing EAS Regioselectivity

Text: 18.9

