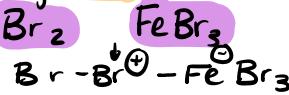
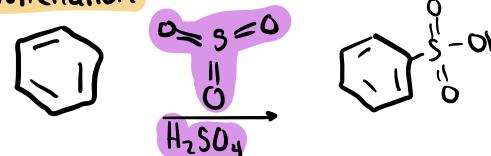


## Benzene Ring Chart

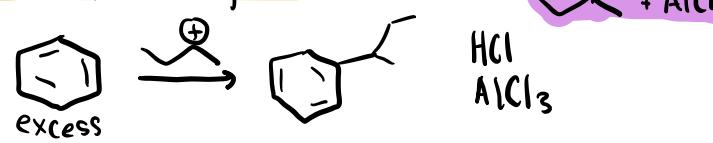
### Hydration



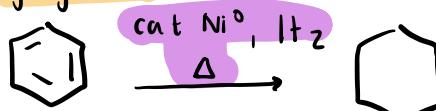
### Sulfenation



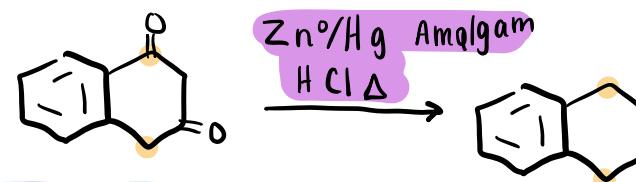
### Friedel-Crafts Alkylation



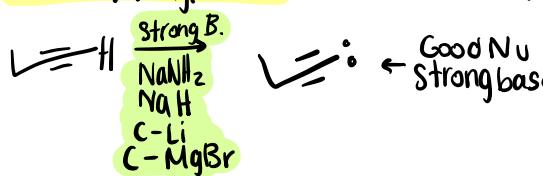
### Hydrogenation



### Clemmenson reduction



### SN2 w/ Alkyl Halides



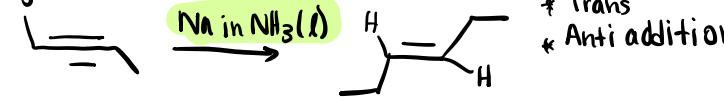
### SN2 w/ unhindered

Good Nu  
Strong base

### Reduction via Cat. Hydrogenation



### Hydration w/ Na+ in Ammonia

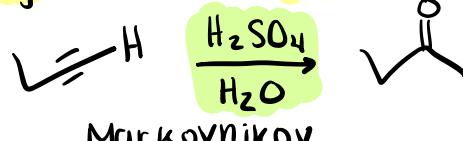


### Halogenation



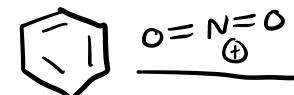
Anti-addition

### Hydration w/ Acidic water

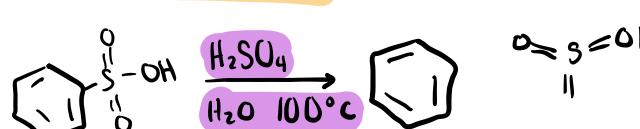


Markovnikov

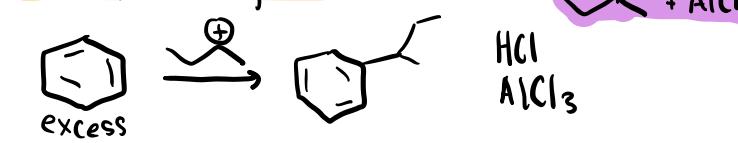
### Nitration



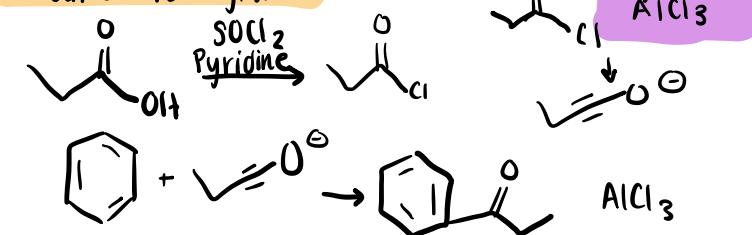
### Reverse Sulfonation



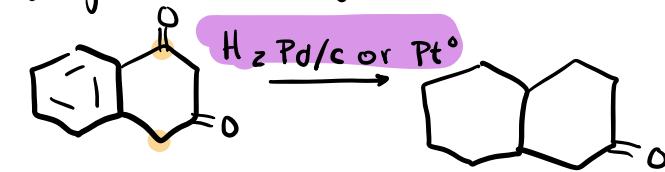
### Friedel-Crafts Acylation



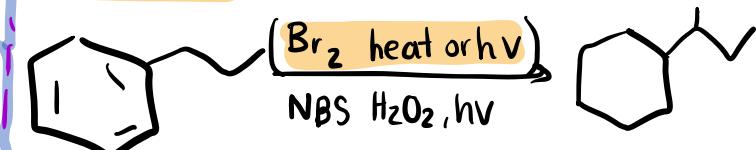
### Friedel-Crafts Acylation



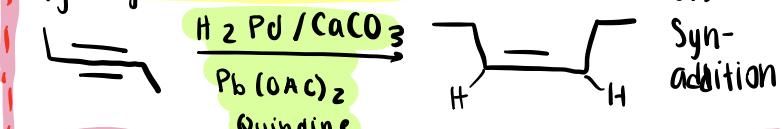
### Hydrogenation (carbohyds)



### Bromination



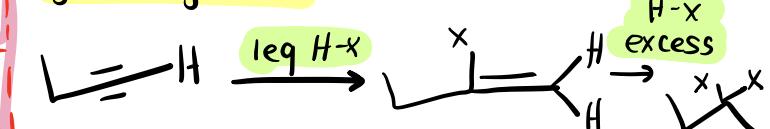
### Hydrogenation w/ Lindlars



cis

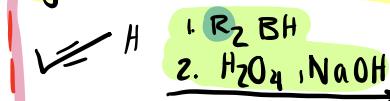
Syn-addition

### Hydrohalogenation



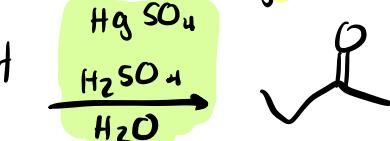
Markonikov  
and Step slower

### Hydroboration-oxidation



Anti-Mark  
Concerted  
Syn-Ad

### Hydration w/ cat. $\text{Hg}^{2+}$



Markovnikov