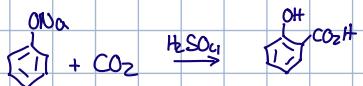
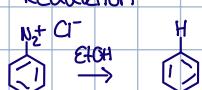


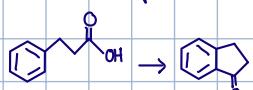
• Kolbe-Schmitt Synthese



• Reduktion

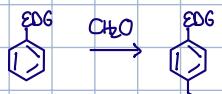


• Friedel-Crafts Acylation

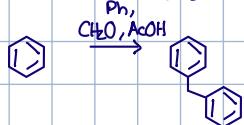


1)  $\text{SOCl}_2$  2)  $\text{AlCl}_3$

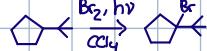
• elekt. arom. Subst. (Hydroxalkylierung)



• Elek. arom. Subst.

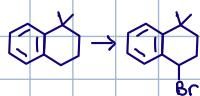


• Radikalreaktion

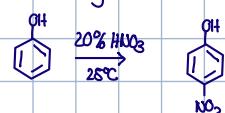


• Radikalreaktion

1.1 eq NBS, AIBN,  $\text{CCl}_4$



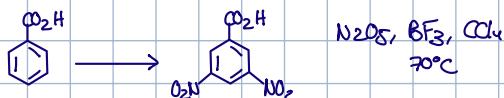
• Nitrierung von Phenol



• Carbonsäure zu Säurechlorid



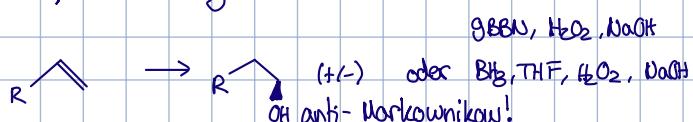
• Nitrierung elekt. arom. Subst.



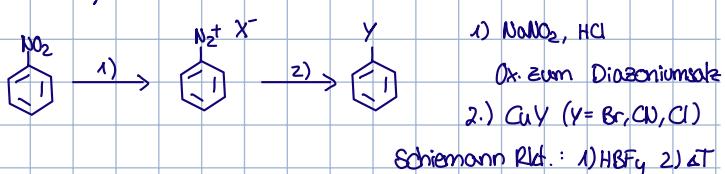
• Oxidative Spaltung mit  $\text{RuO}_4$



• Hydroborierung + Oxidation



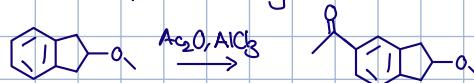
• Sandmeyer Reaktion



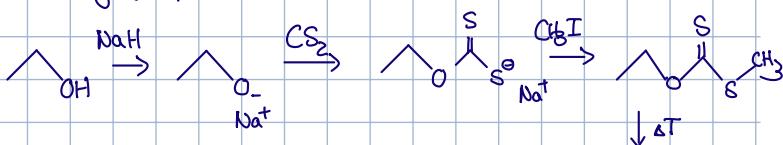
Schiemann Rkt.: 1)  $\text{HBF}_4$ , 2)  $\Delta T$

$Y = F$

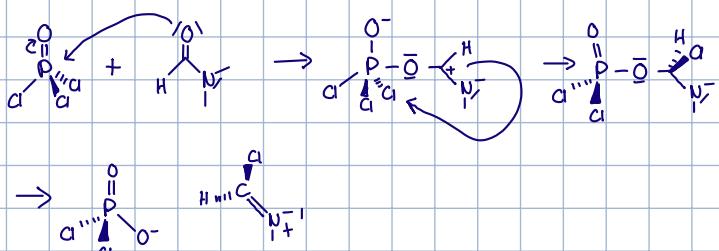
• Friedel-Crafts Acylation



• Tschugaeff Pyrolyse



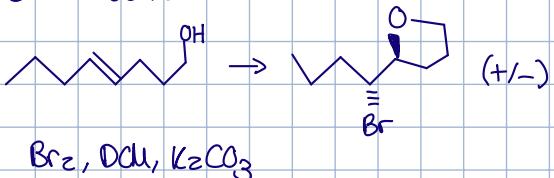
• Mechanismus:  $\text{POCl}_3 + \text{DNF}$



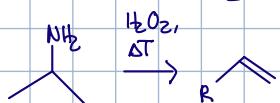
- Clemmensen Reduktion



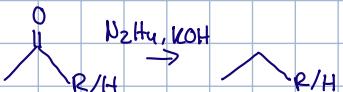
- elekt. Addition



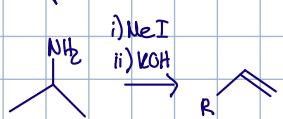
- Cope Eliminierung



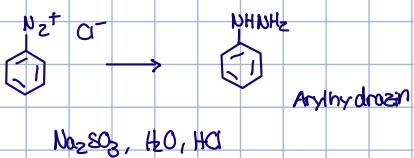
- (Wolf-)Kishner - Reduktion



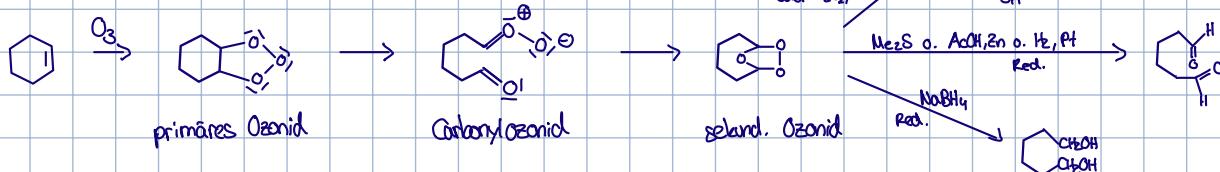
- Hofmann Abbau



- Elekt. arom. Subst.



- Ozonolyse + Aufarbeitung (Mechanismus)



- Von Slyke Reaktion

