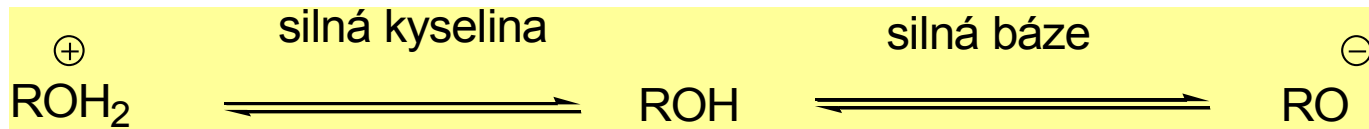


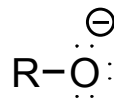
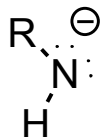
ALKOHOLY



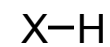
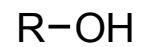
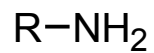
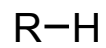
» Amfoterní charakter alkoholů



růst stability aniontu



růst kyselosti



pK_a 45 - 50

35 - 40

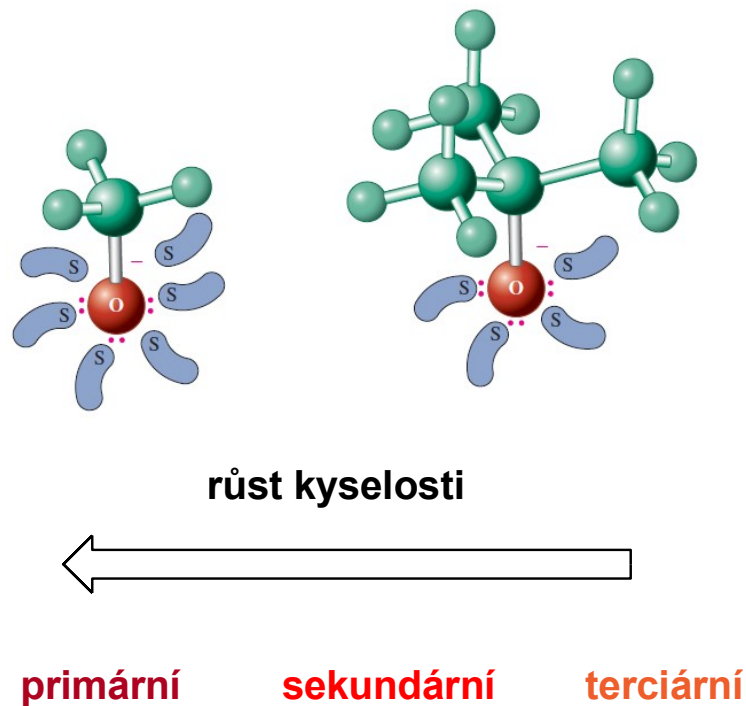
15 - 18

(-10) - 3

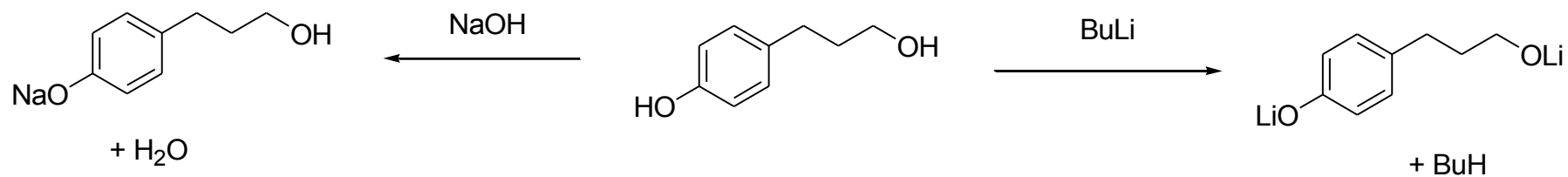


Kyselost alkoholů

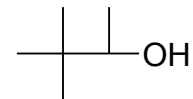
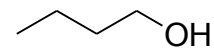
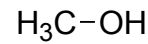
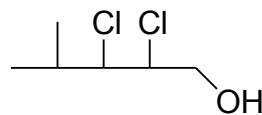
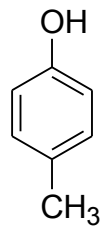
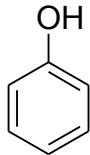
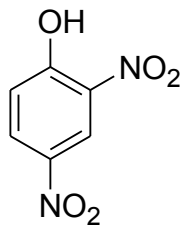
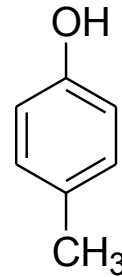
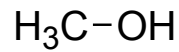
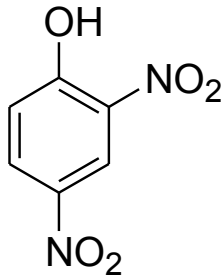
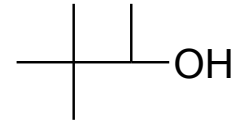
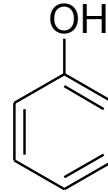
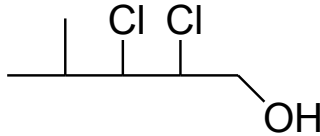
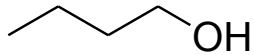
	pK _a		pK _a
<chem>CO</chem>	15,1	<chem>Oc1ccccc1</chem>	10,0
<chem>CCO</chem>	15,9		
<chem>CCCO</chem>	16,1		
<chem>CC(C)O</chem>	17,1		
<chem>CC(C)(C)O</chem>	18,0		



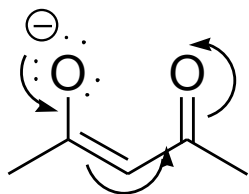
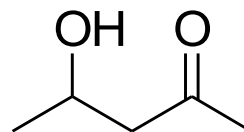
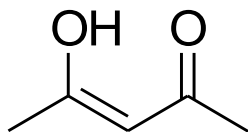
Kyselost alkoholů



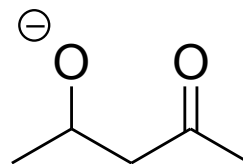
» Následující alkoholy seřadte podle vzrůstající kyselosti



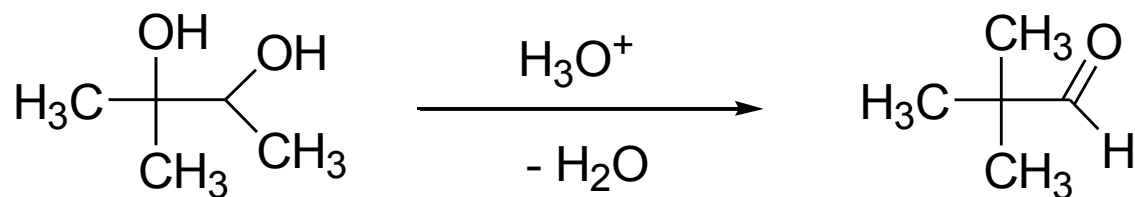
» Zdůvodněte, která ze sloučenin je kyselější



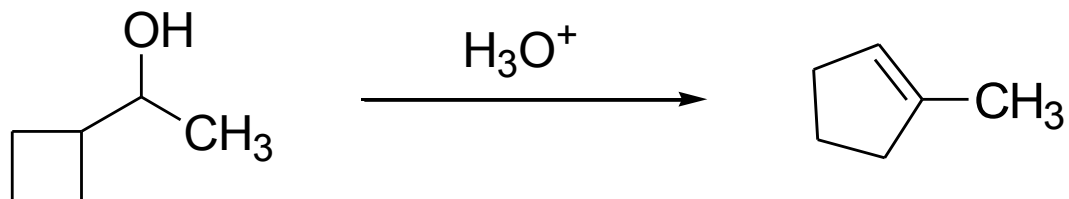
stabilnější



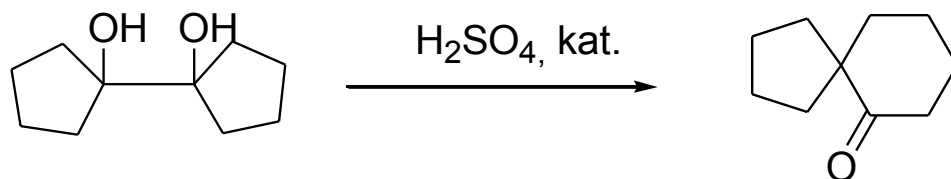
» Dehydratace alkoholů – napište mechanismus uvedené reakce



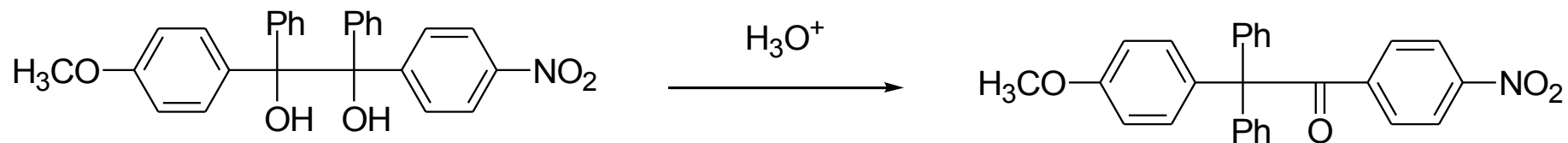
» Dehydratace alkoholů – napište mechanismus uvedené reakce



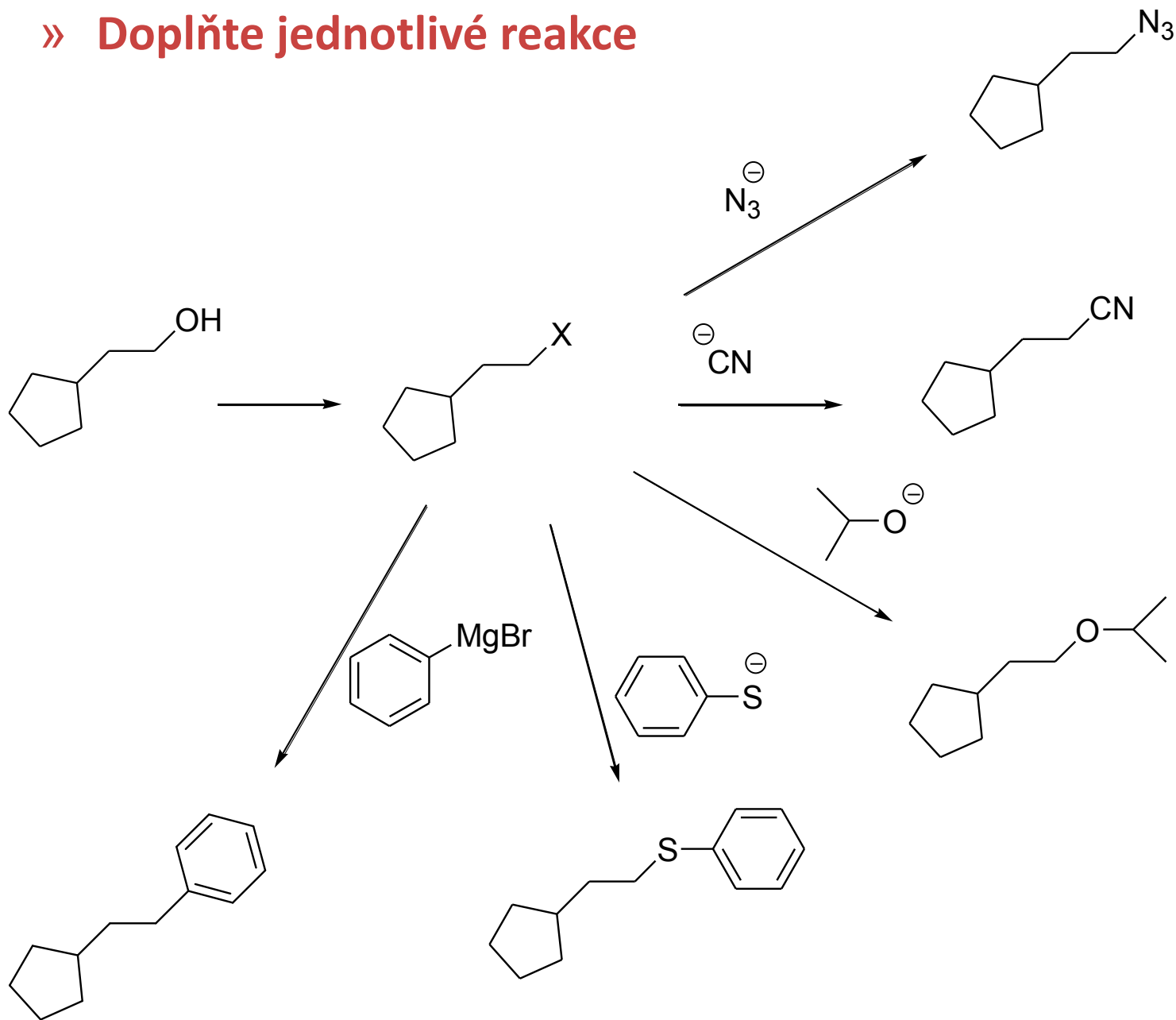
» Dehydratace alkoholů – doplňte hlavní produkt a napište mechanismus uvedené reakce



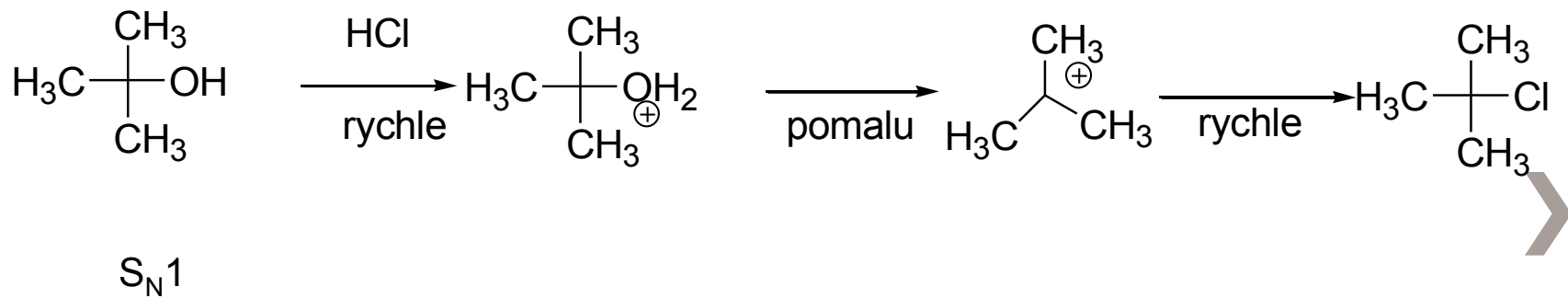
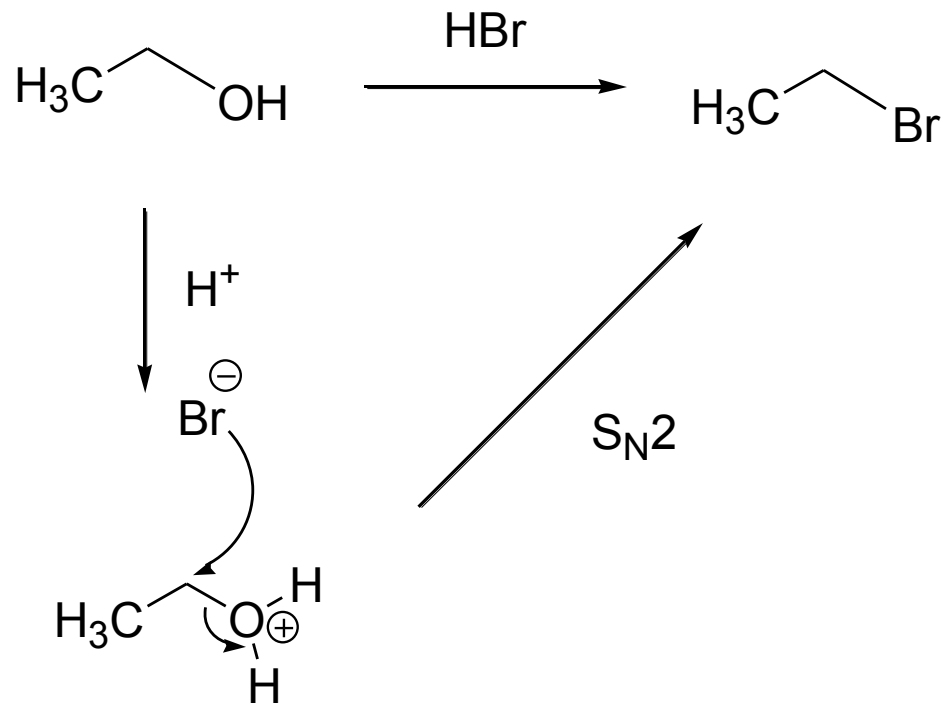
» Dehydratace alkoholů – napište mechanismus uvedené reakce a zdůvodněte vznik hlavního produktu



» Doplňte jednotlivé reakce

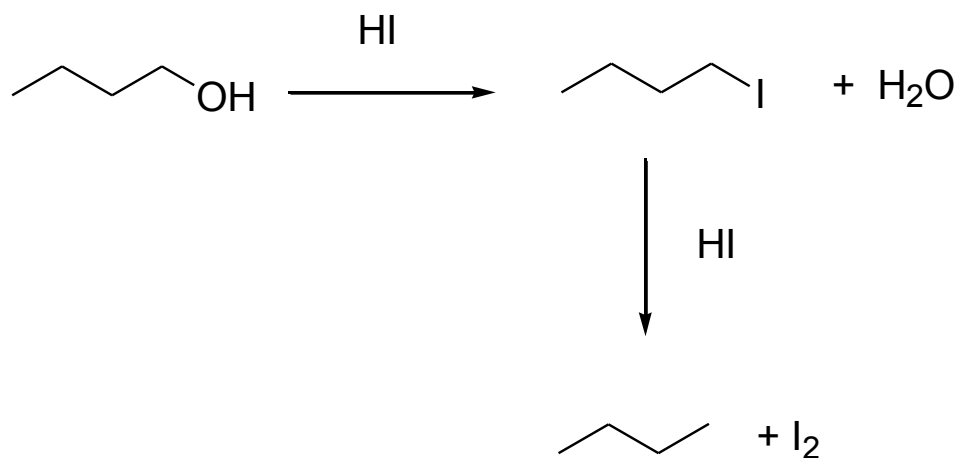
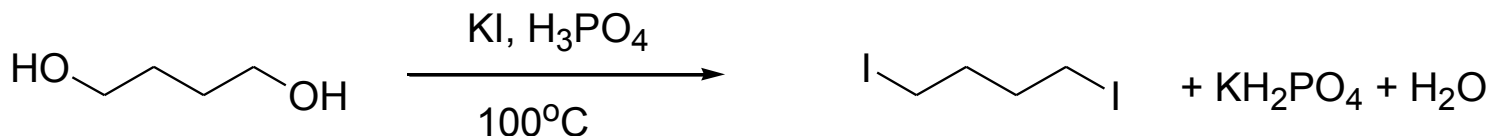


» Konverze alkoholů na alkylhalogenidy



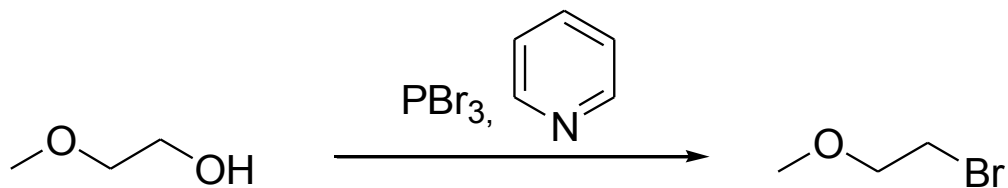
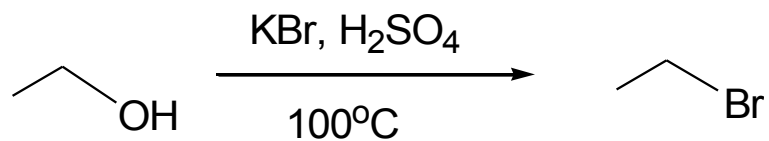
» Konverze alkoholů na alkylhalogenidy

Příprava jod-derivátů

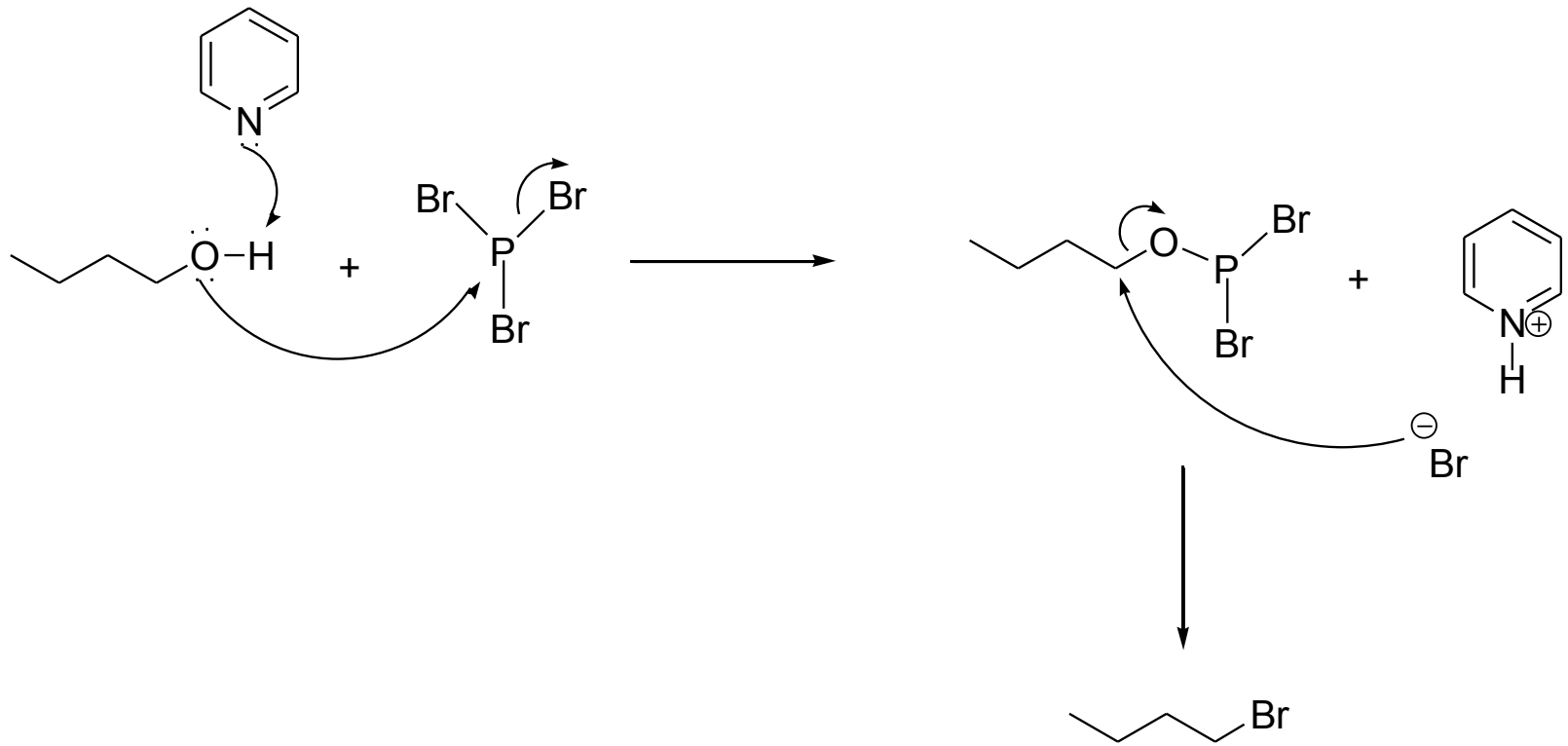


» Konverze alkoholů na alkylhalogenidy

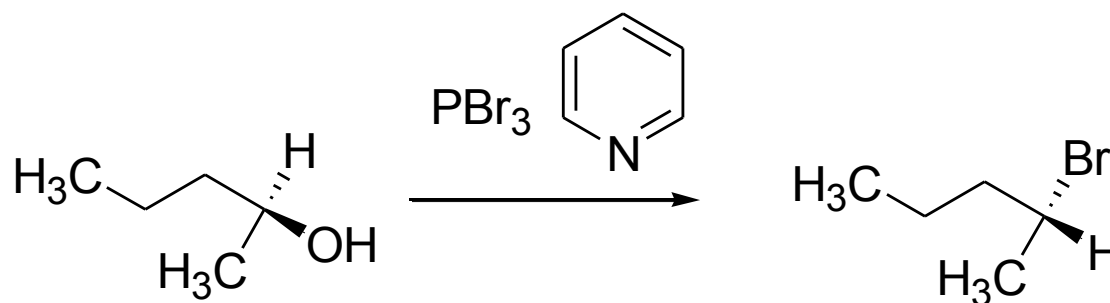
Příprava brom-derivátů



» Konverze alkoholů na alkylhalogenidy



» Konverze alkoholů na alkylhalogenidy

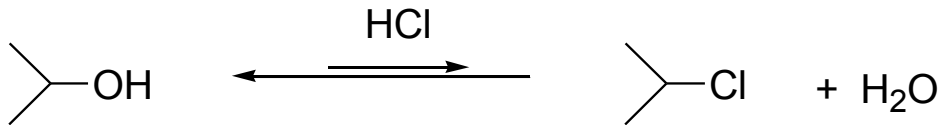


u sekundárních alkoholů pozorovaná inverze konfigurace



» Konverze alkoholů na alkylhalogenidy

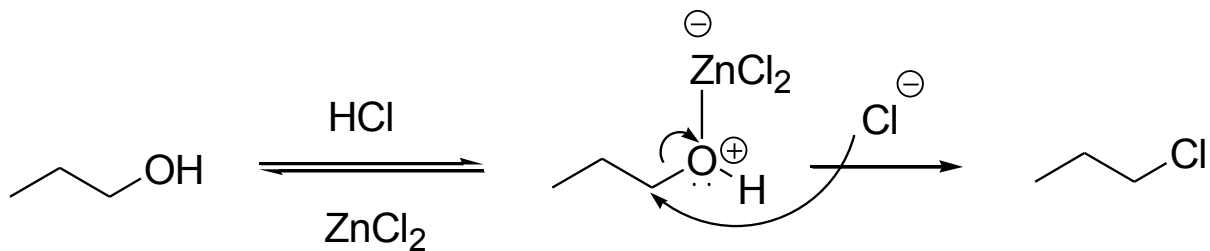
Příprava chlor-derivátů



odstranění vody, posun rovnováhy

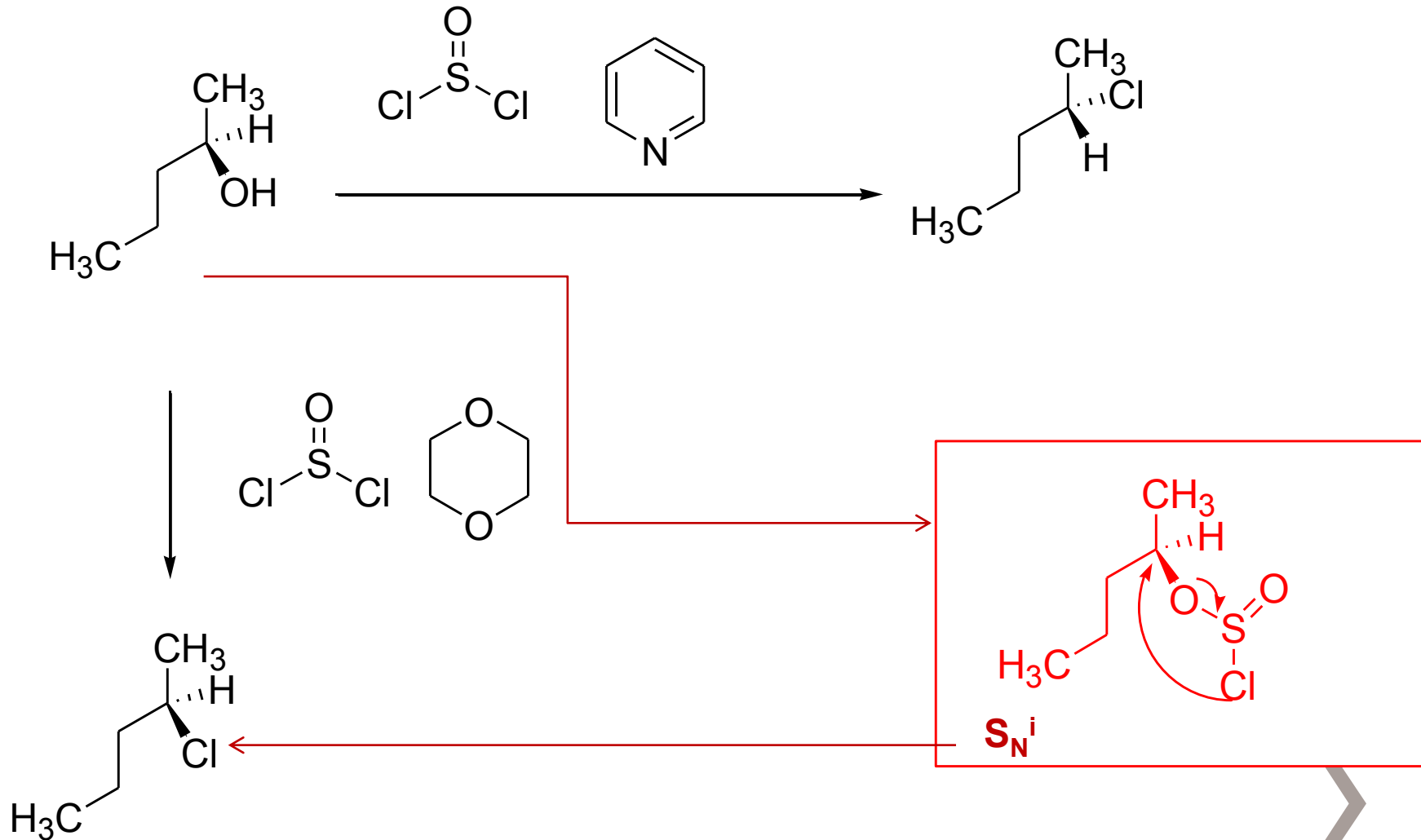
u terciárních mechanismus monomolekulární – snadný průběh

Lukasův test

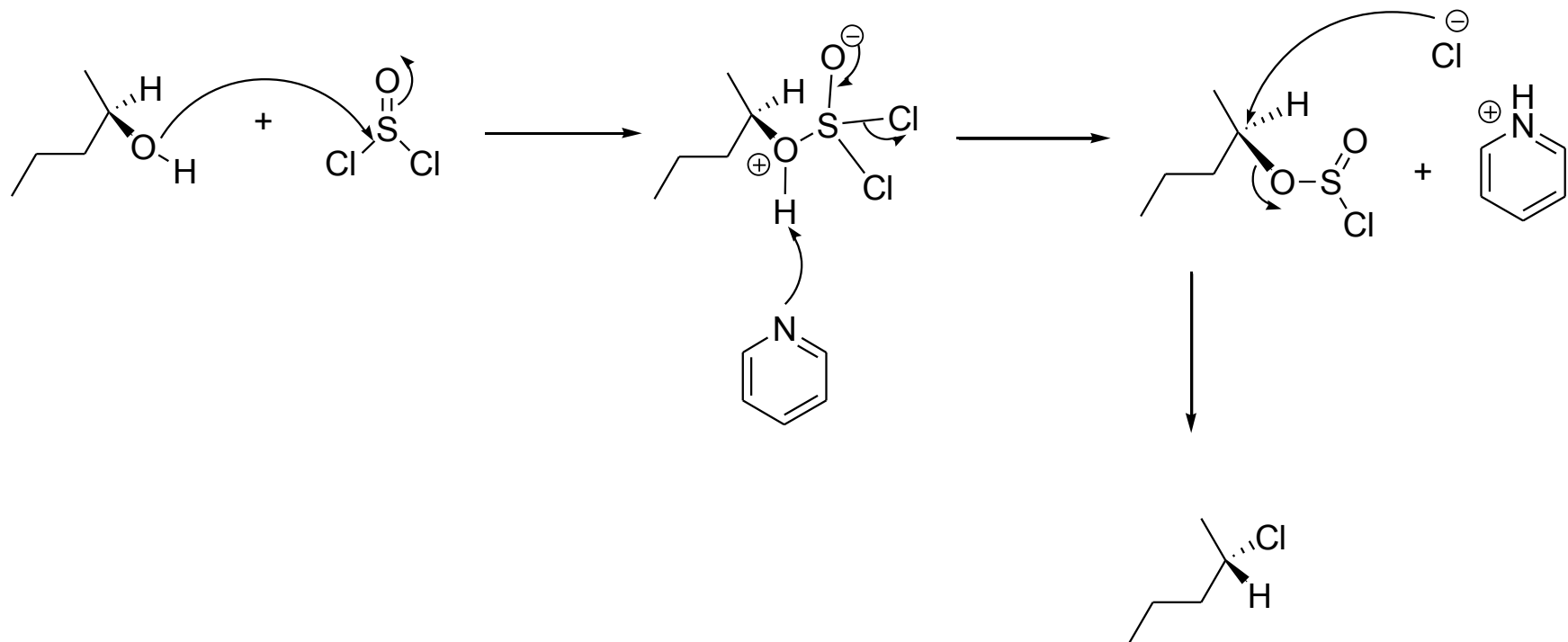


» Konverze alkoholů na alkylhalogenidy

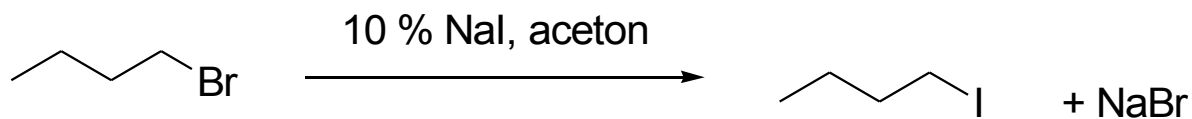
Příprava chlor-derivátů



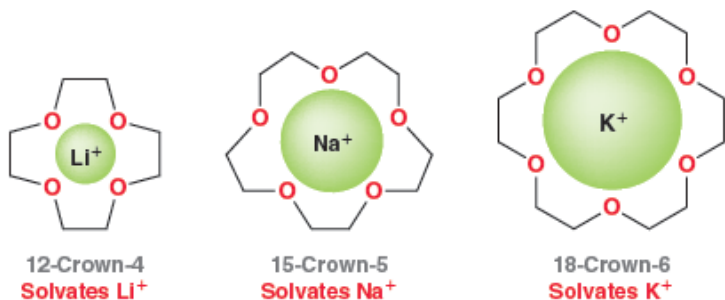
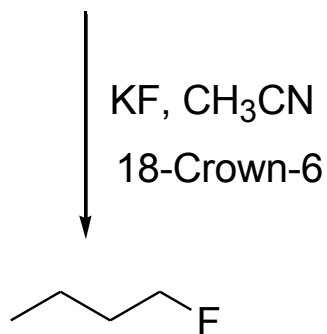
» Mechanismus reakce s thionylchloridem s inverzí konfigurace



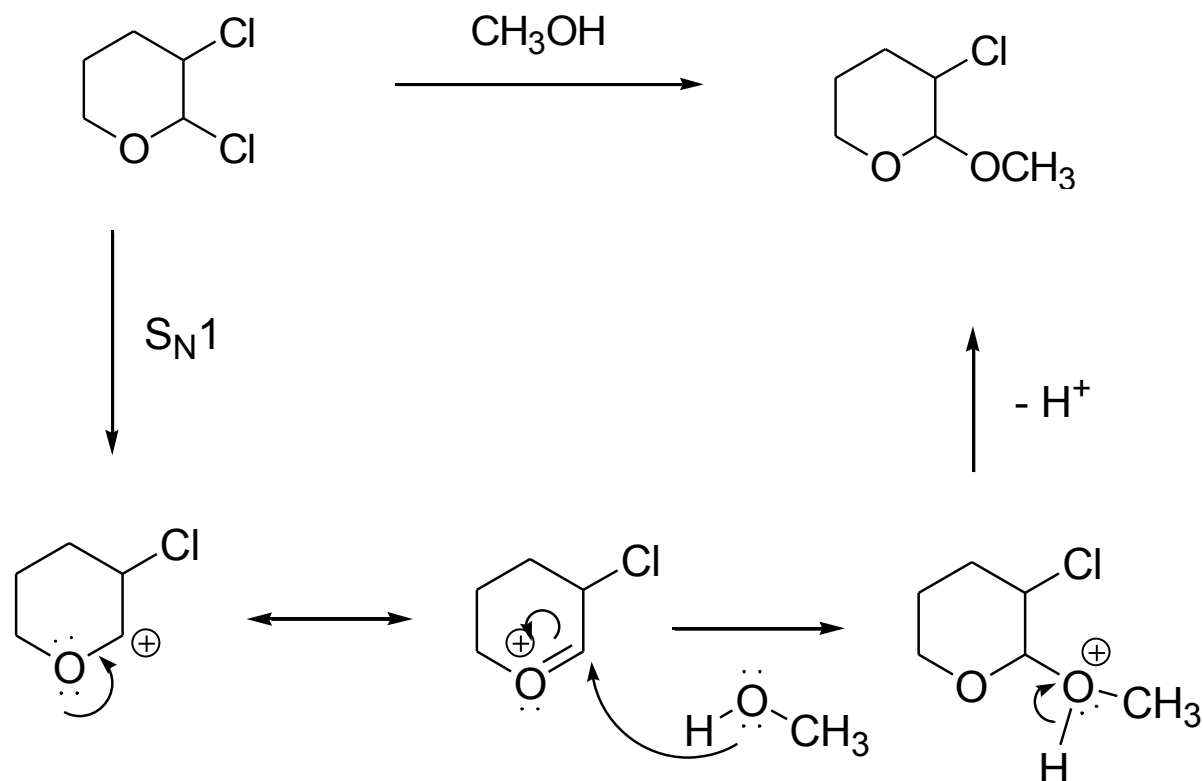
» Vzájemné přeměny alkyhalogenidů



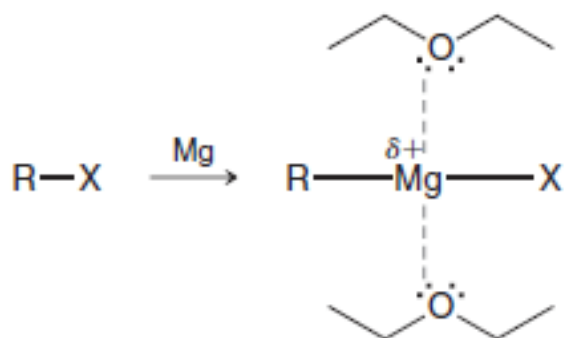
Finkelsteinova reakce



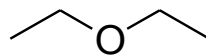
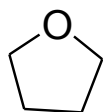
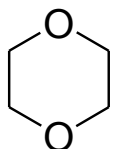
» Vysvětlete vznik hlavního produktu reakce, pomocí šipek запиšte mechanismus

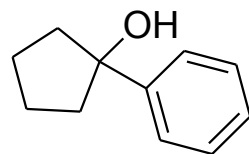
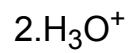
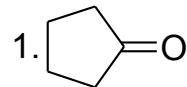
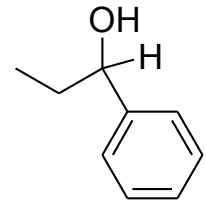
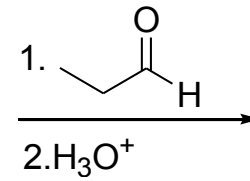
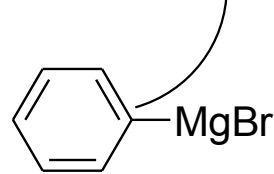
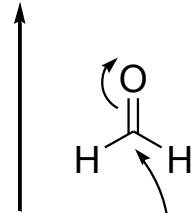
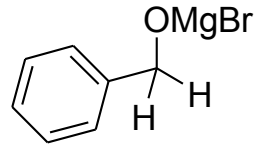
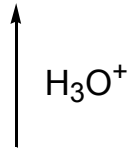
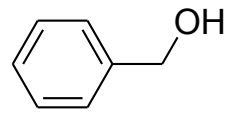


» Alkoholy reakcí Grignardových činidel s karbonylovými sloučeninami

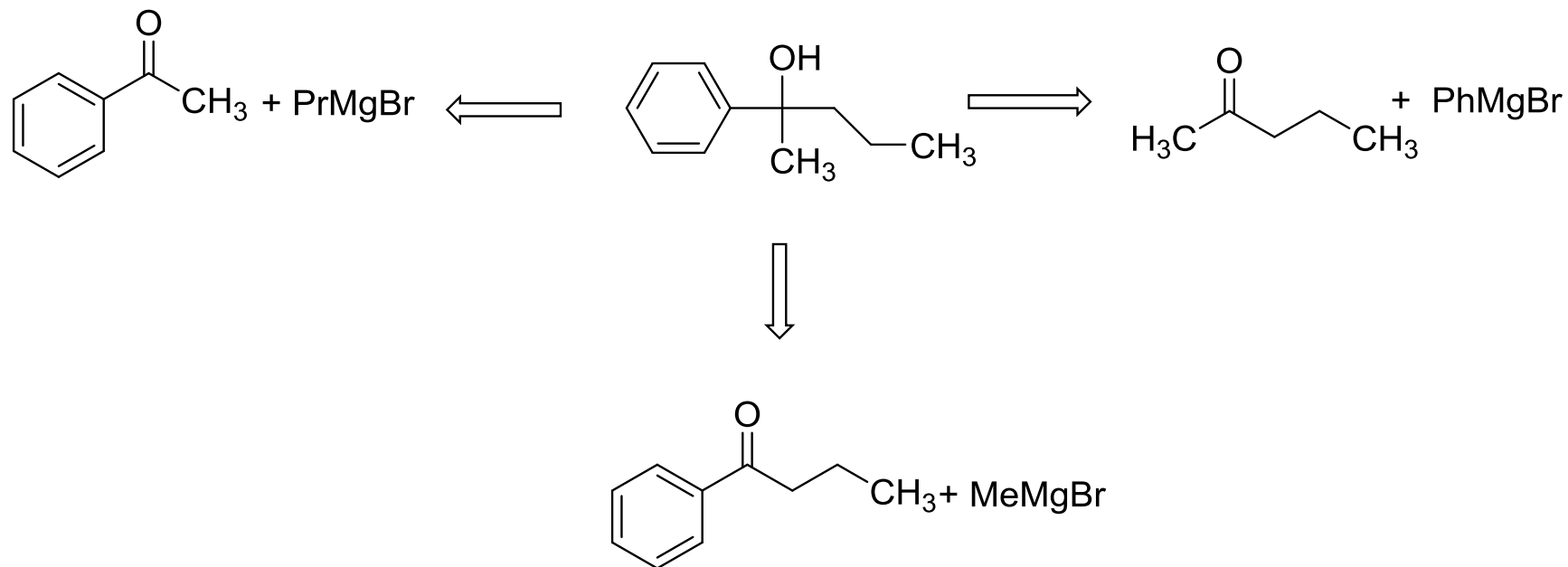


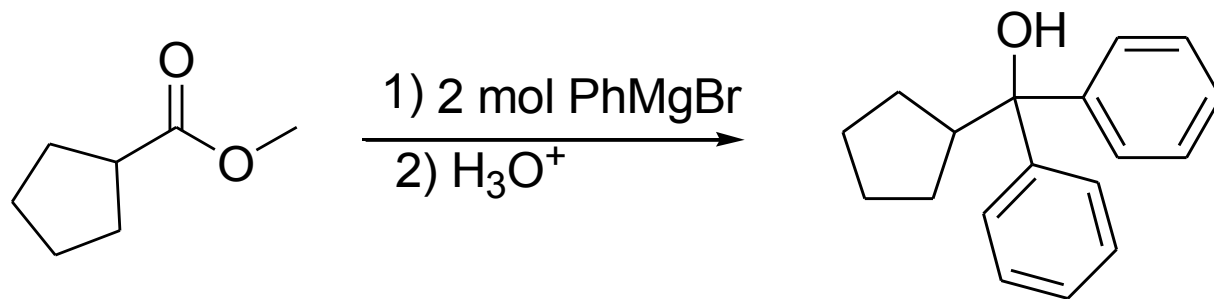
vhodná rozpouštědla

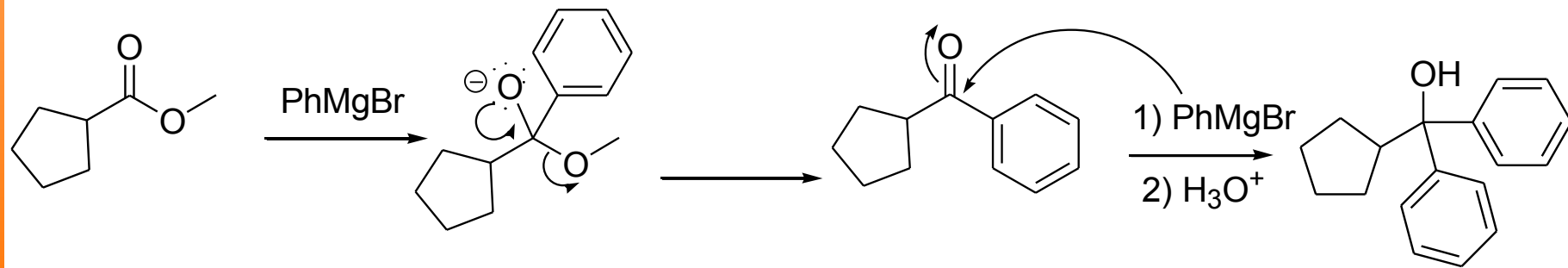




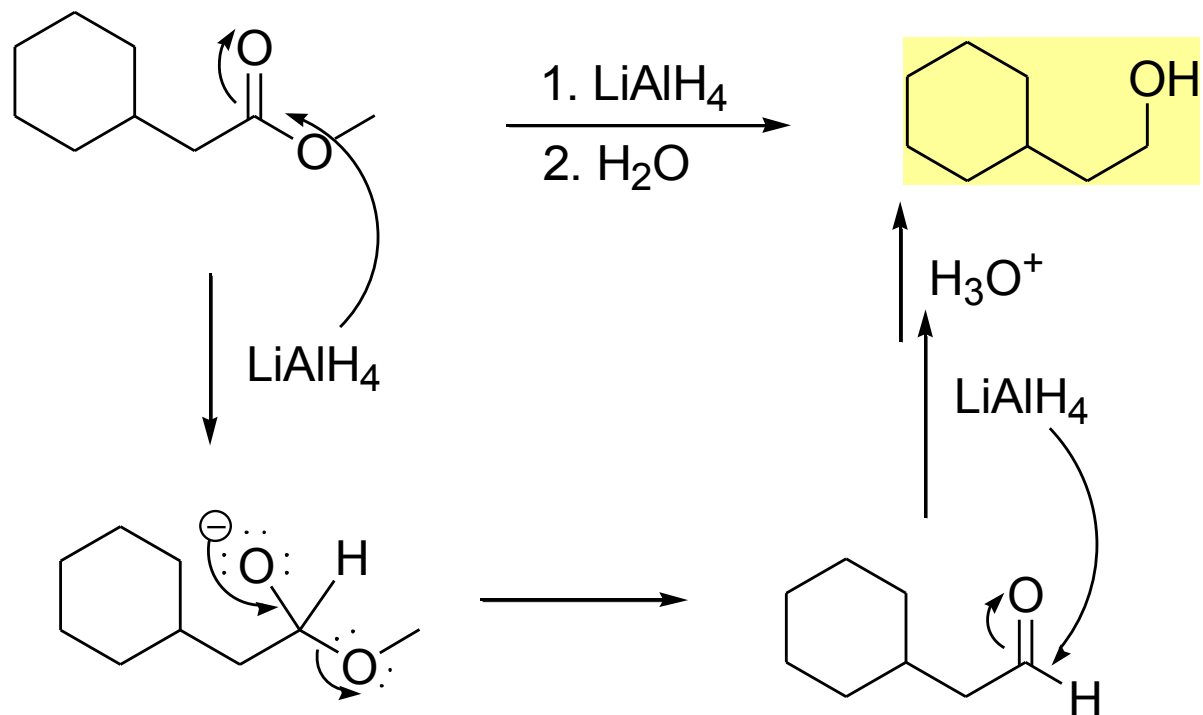
» Připravte pomocí G. č. následující sloučeninu



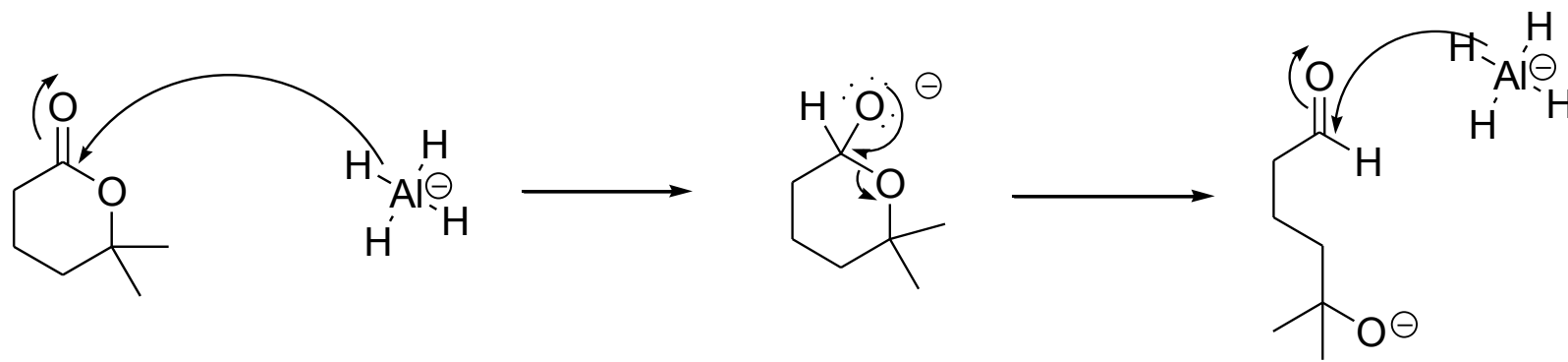
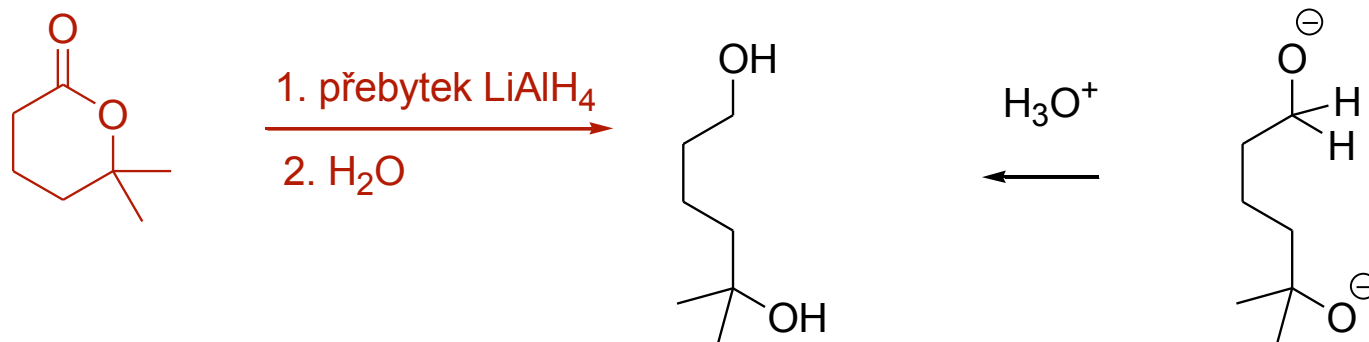




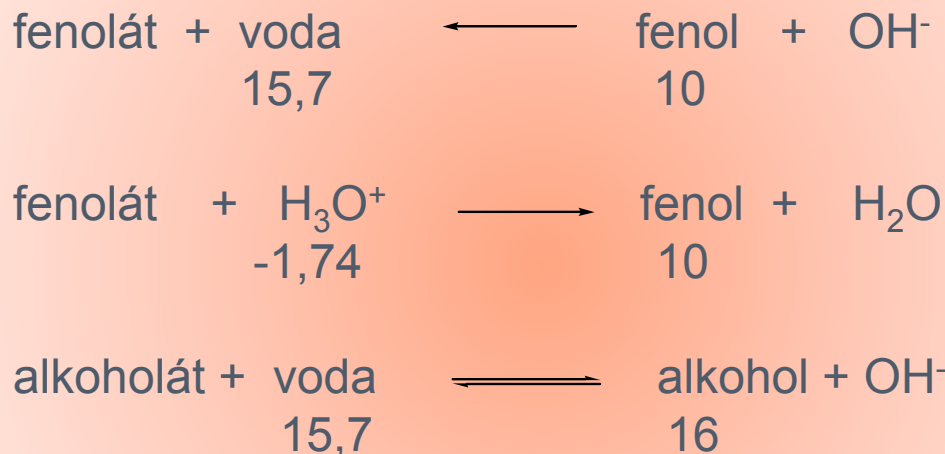
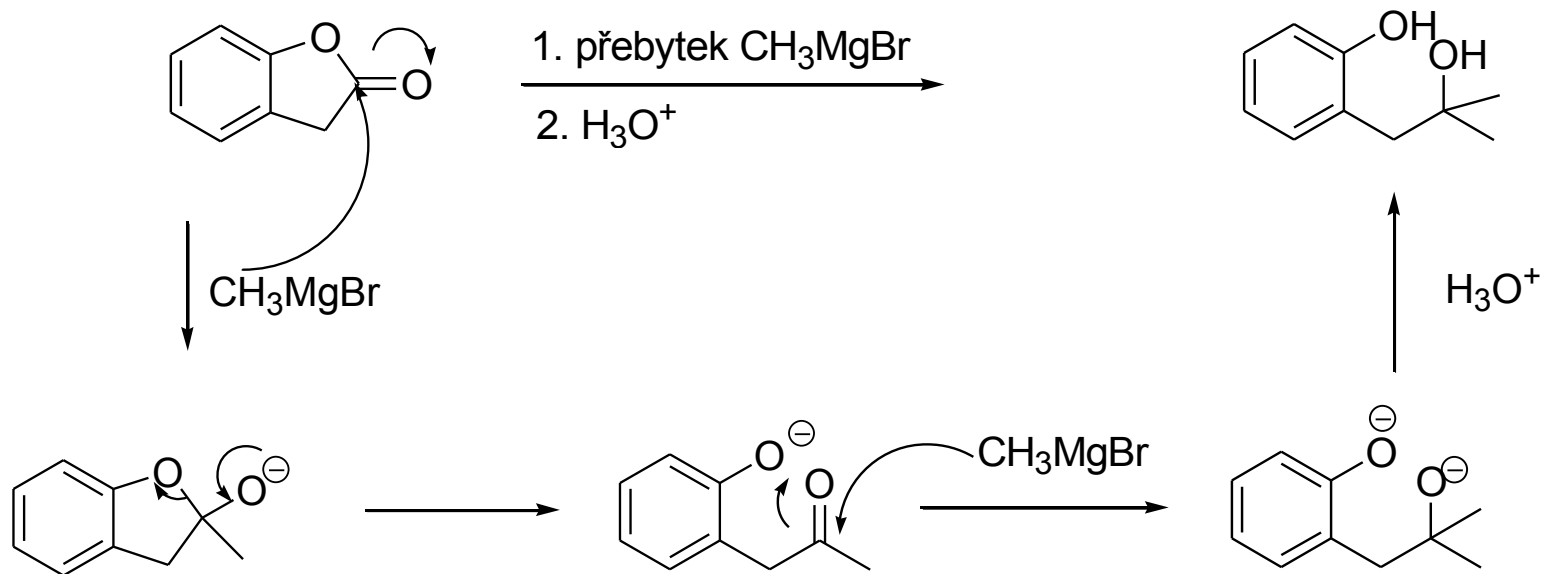
» Doplňte hlavní produkt následující reakce a napište mechanismus jeho vzniku



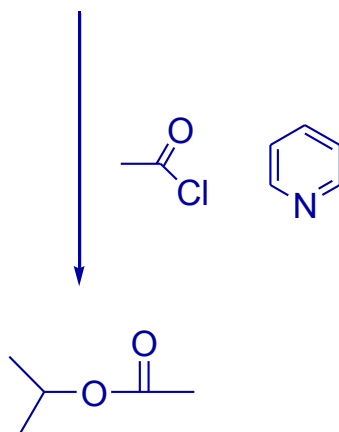
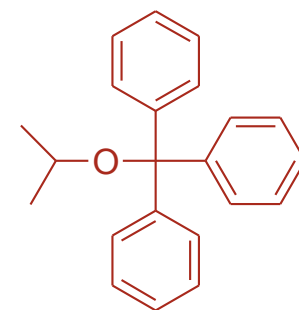
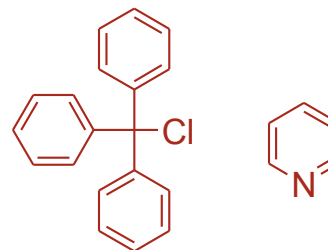
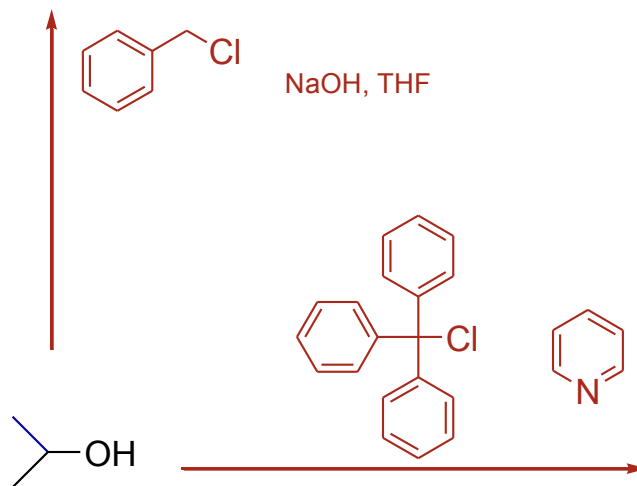
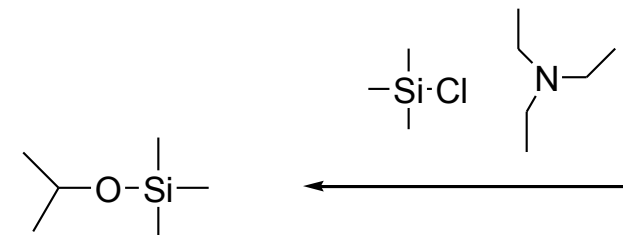
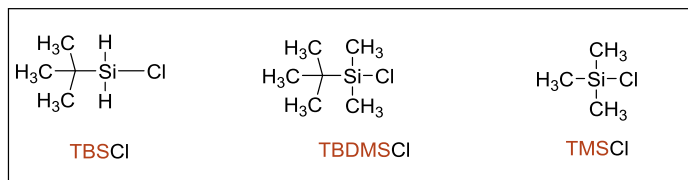
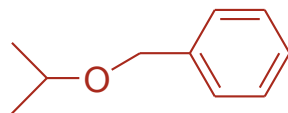
» Doplňte hlavní produkt reakce a s pomocí šipek запиšte mechanismus jeho vzniku



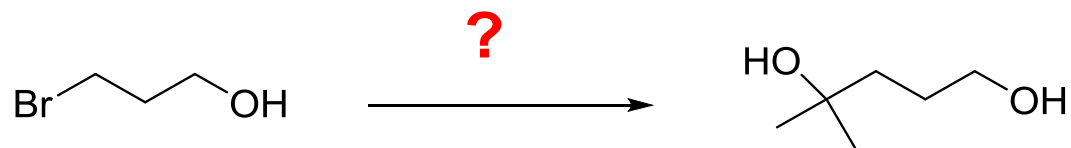
» Doplňte hlavní produkt reakce a zdůvodněte, proč je ve druhém kroku potřeba kyselé prostředí místo pouhé vody



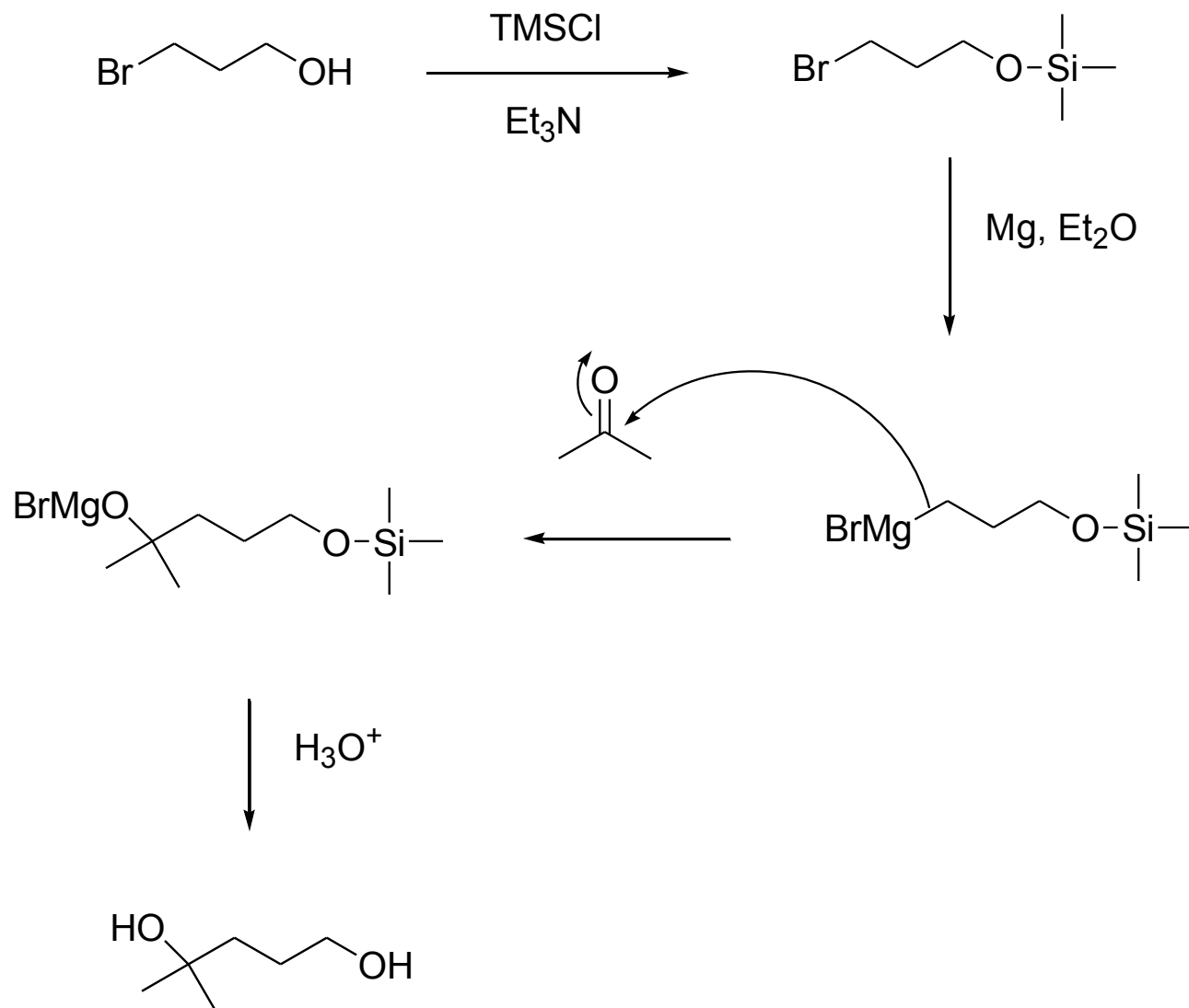
» Chránění hydroxylové skupiny

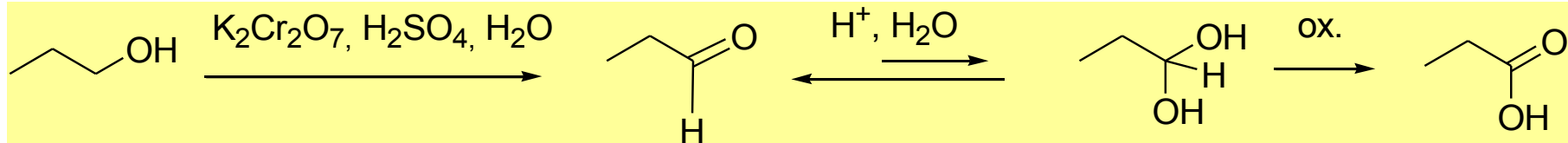
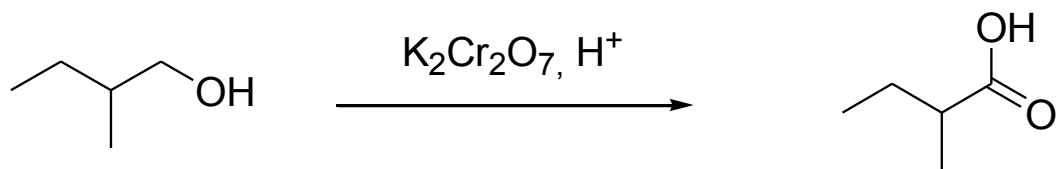


» Využití chránicí skupiny



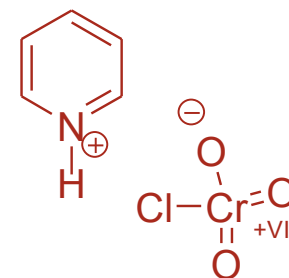
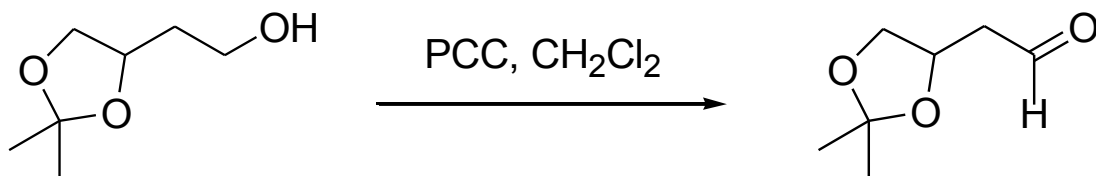
» Využití chránicí skupiny



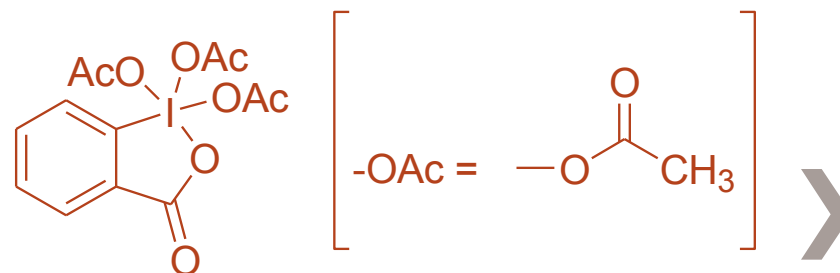


Collinsovo činidlo $\text{CrO}_3 \cdot 2 \text{Py}$

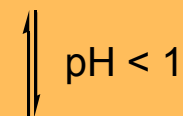
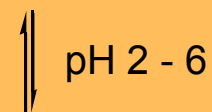
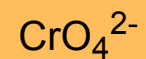
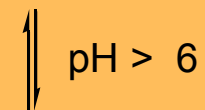
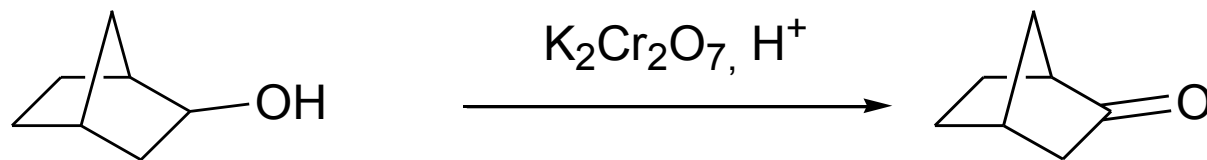
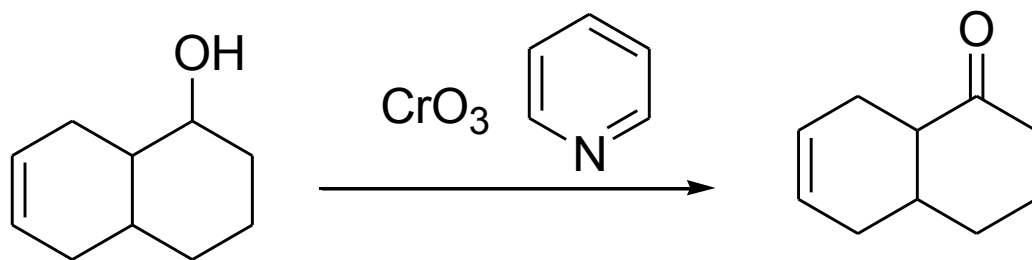
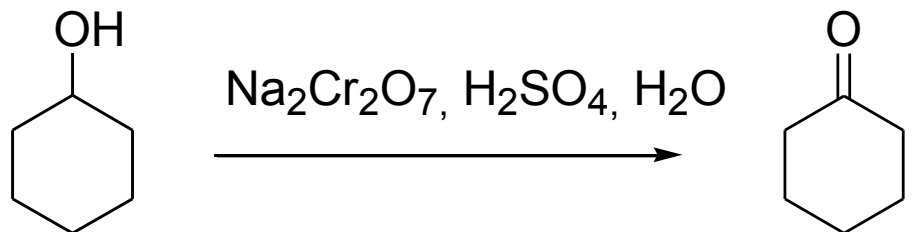
PCC pyridinium-chlorochromát $\text{CrO}_3 \cdot \text{Py} \cdot \text{HCl}$



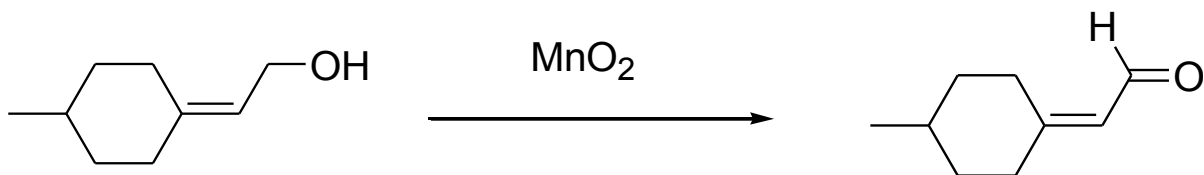
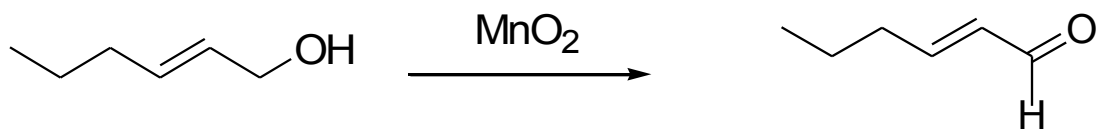
DMP Dess- Martin periodinane



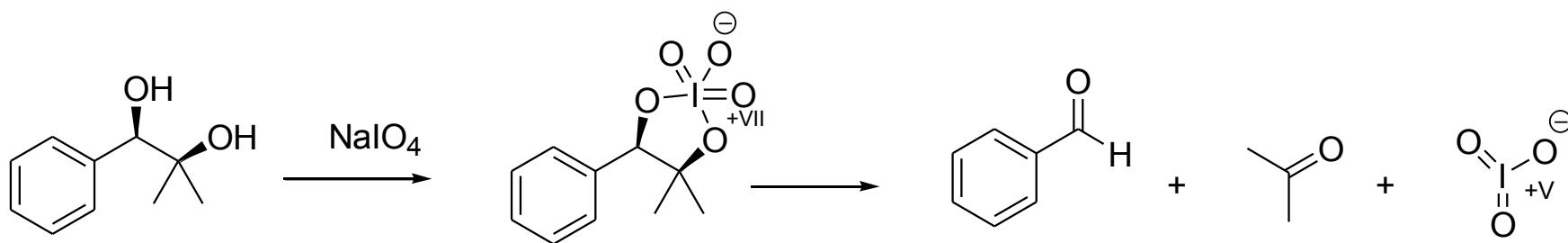
» Oxidace alkoholů



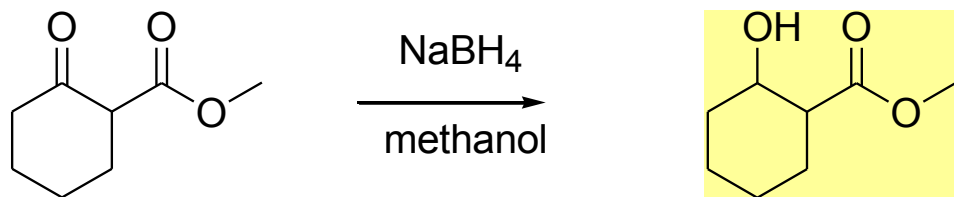
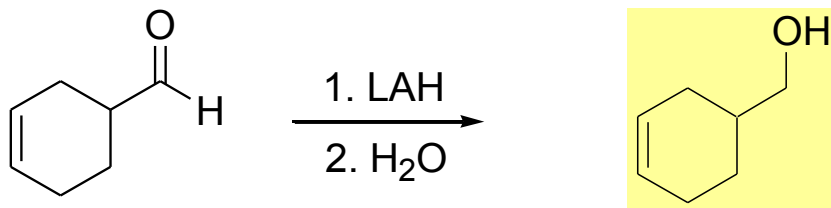
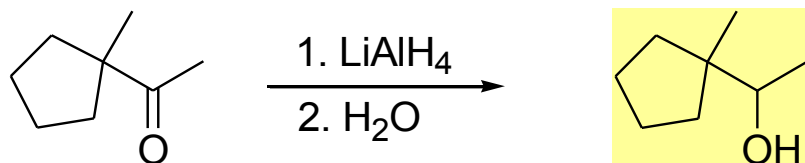
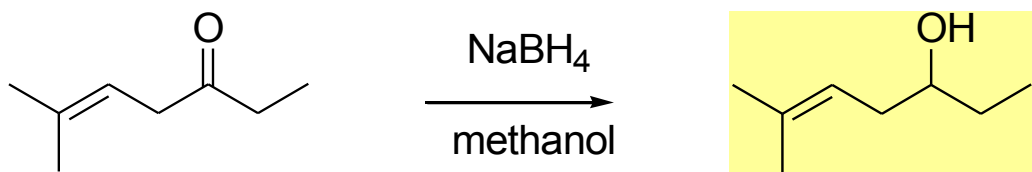
MnO₂ pro oxidaci allyl a benzylalkoholů



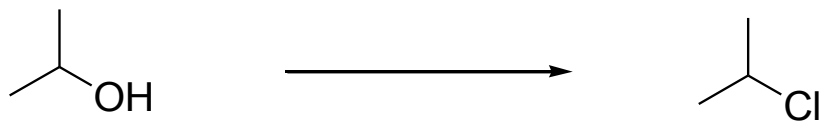
» **Oxidativní štěpení diolů** viz oxidativní štěpení alkenů



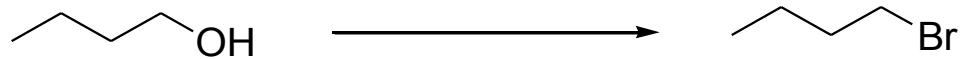
» Doplňte hlavní produkty následujících reakcí



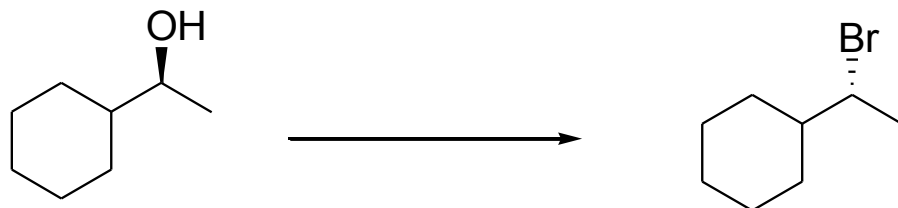
» Identifikujte reagenty pro následující přeměny



1) TsCl, pyridin 2) NaCl
SOCl ₂
HCl, ZnCl ₂



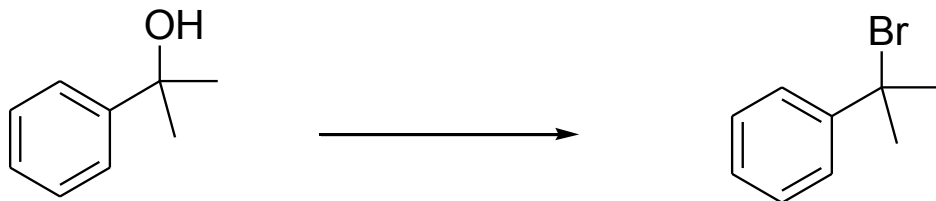
1) TsCl, pyridin 2) NaBr
HBr
PBr ₃



1) TsCl, pyridin 2) NaBr
PBr ₃



» Identifikujte reagenty pro následující přeměny



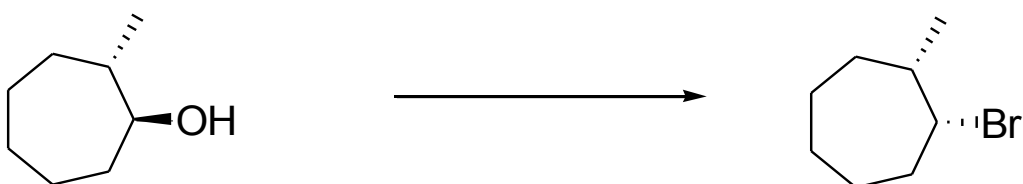
HBr



1) TsCl, pyridin
2) NaCl

SOCl₂, pyridin

HCl, ZnCl₂

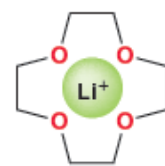
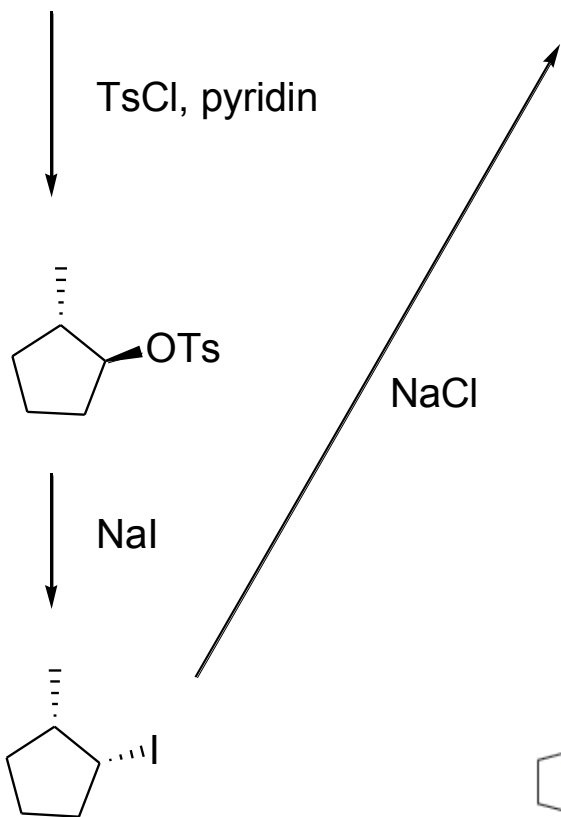
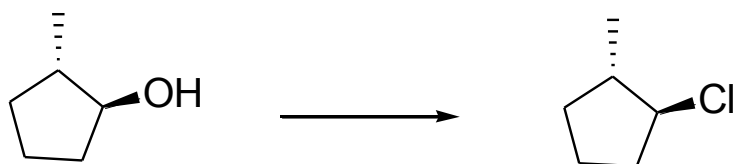


1) TsCl, pyridin
2) NaBr

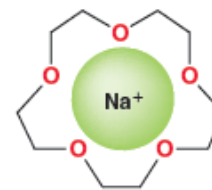
PBr₃



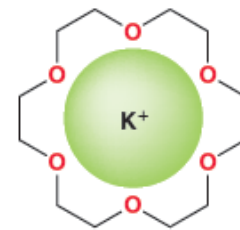
» Identifikujte reagenty pro následující přeměnu



12-Crown-4
Solvates Li^+

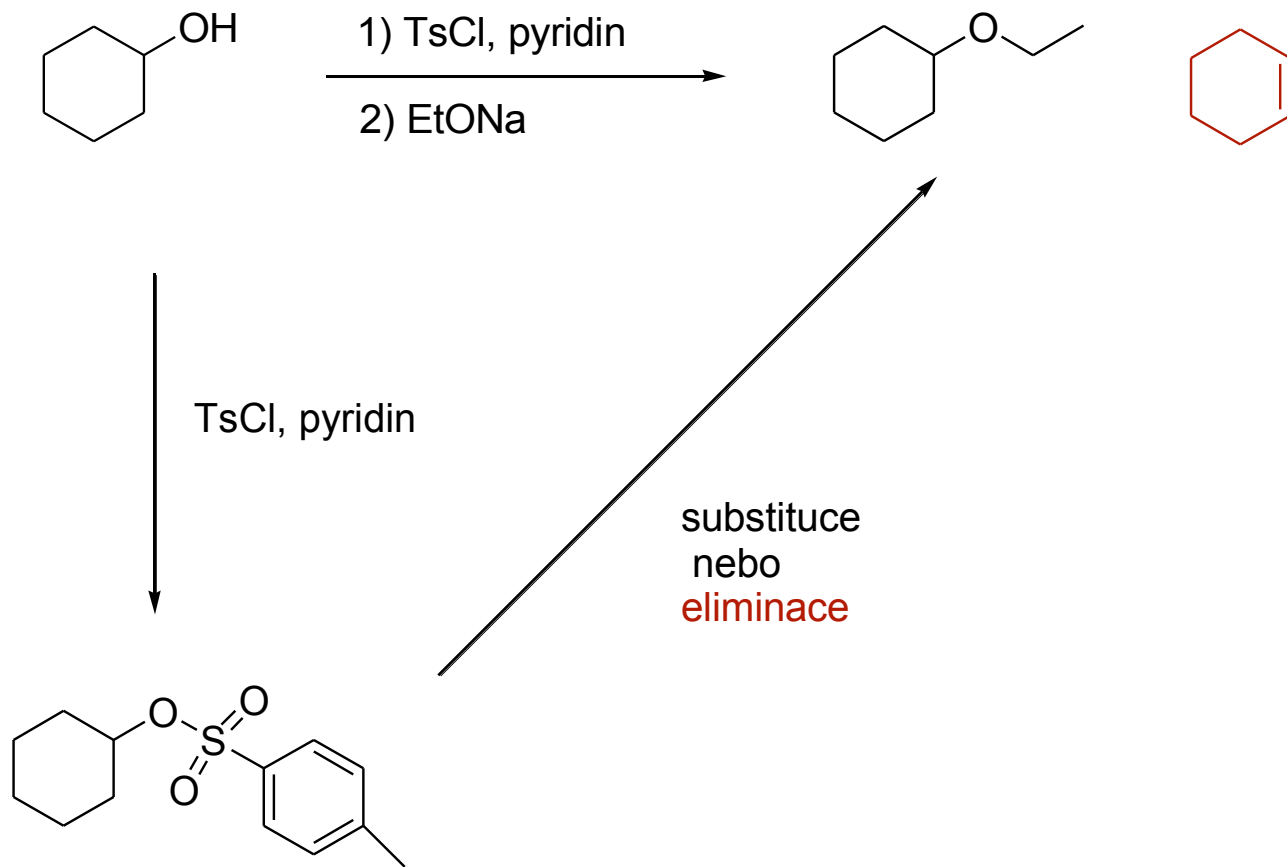


15-Crown-5
Solvates Na^+

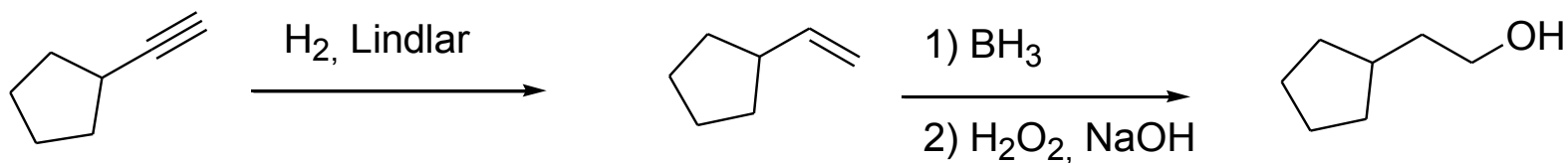


18-Crown-6
Solvates K^+

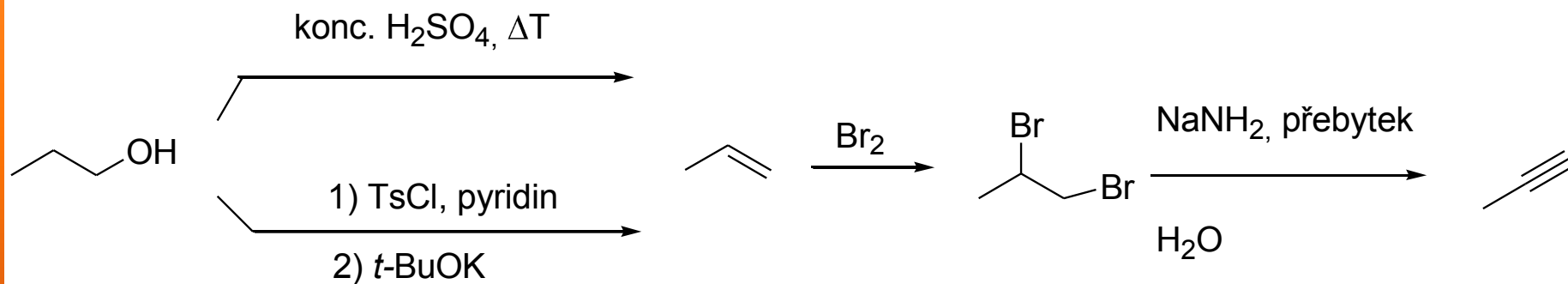
» Nakreslete možné produkty uvedené reakce a předpovězte, který z nich bude převládat



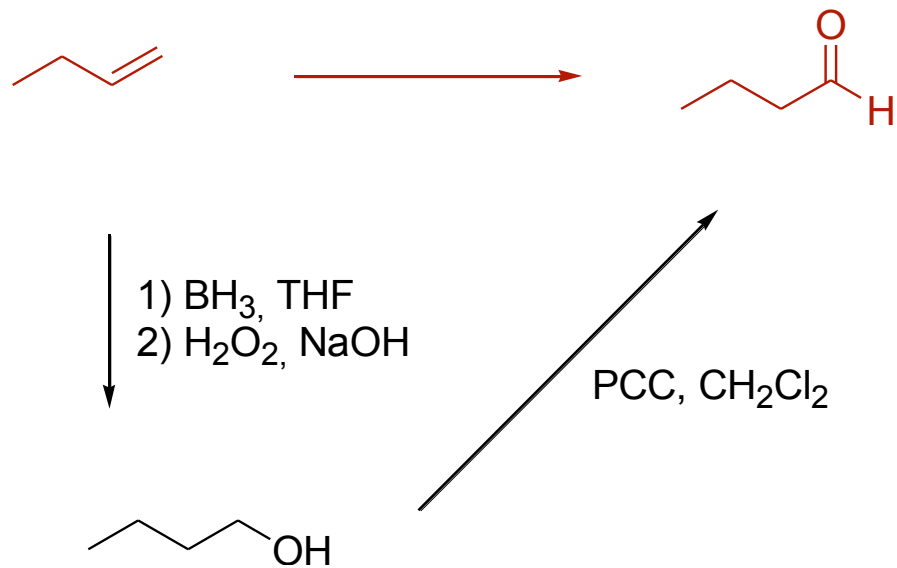
» Navrhněte reagenty pro následující přeměnu



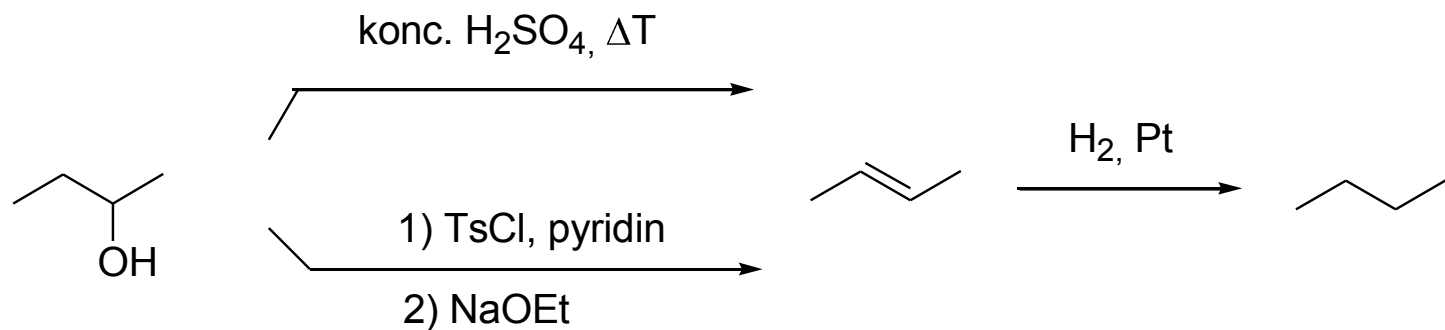
» Navrhňte reagenty pro následující přeměny



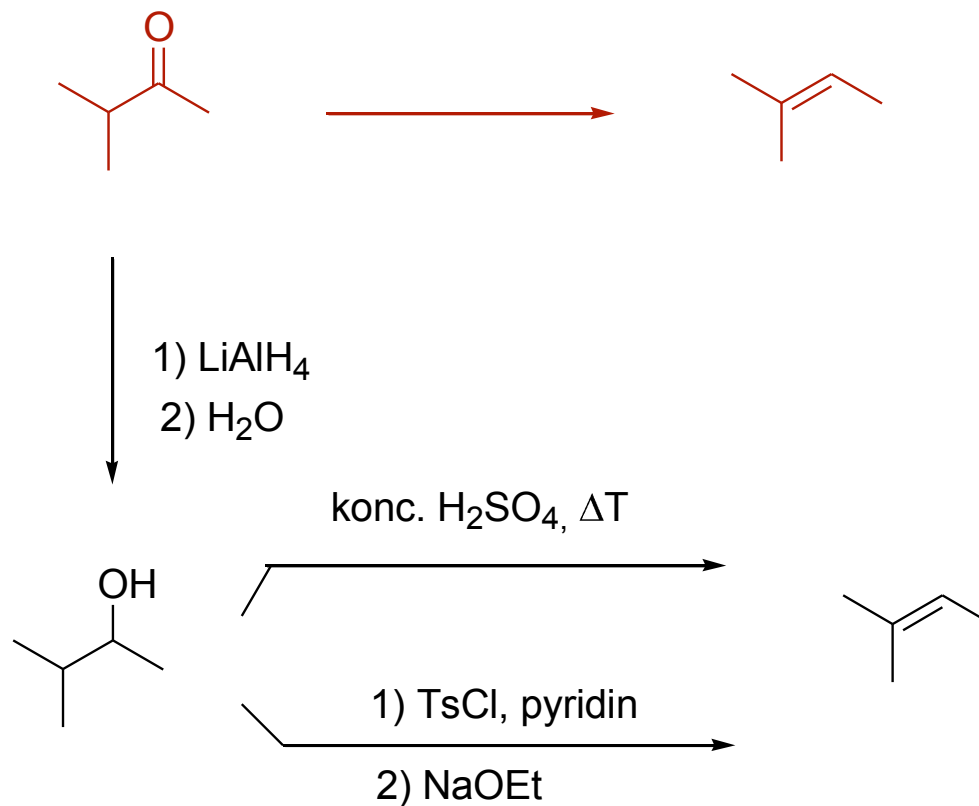
» Navrhněte reagenty pro následující přeměnu



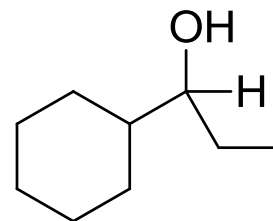
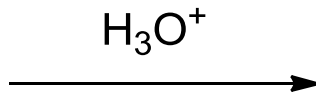
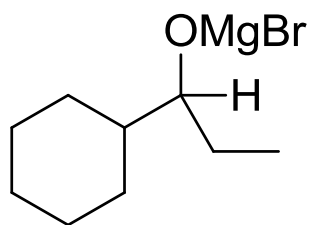
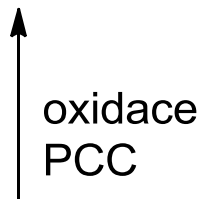
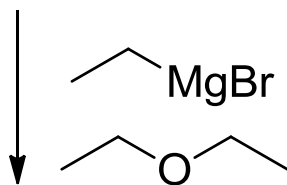
» Navrhněte reagenty pro následující přeměnu



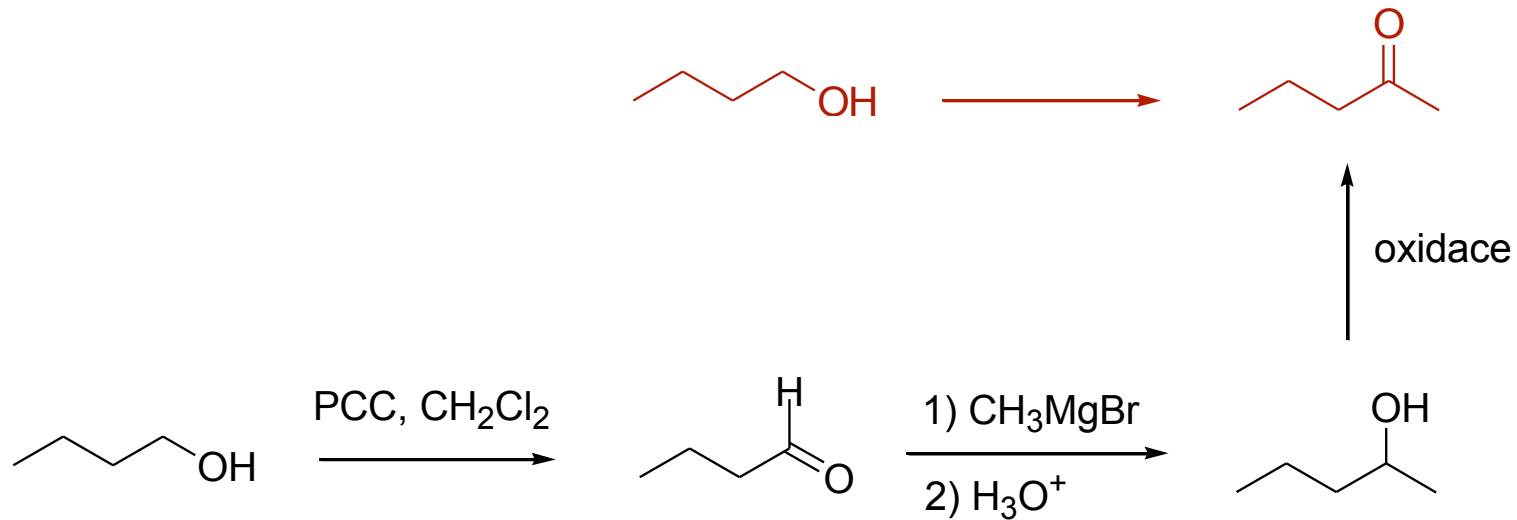
» Navrhněte reagenty pro následující přeměnu



» Navrhňte reagenty pro následující přeměnu



» Navrhněte reagenty pro následující přeměnu



» Navrhněte reagenty pro následující přeměnu

