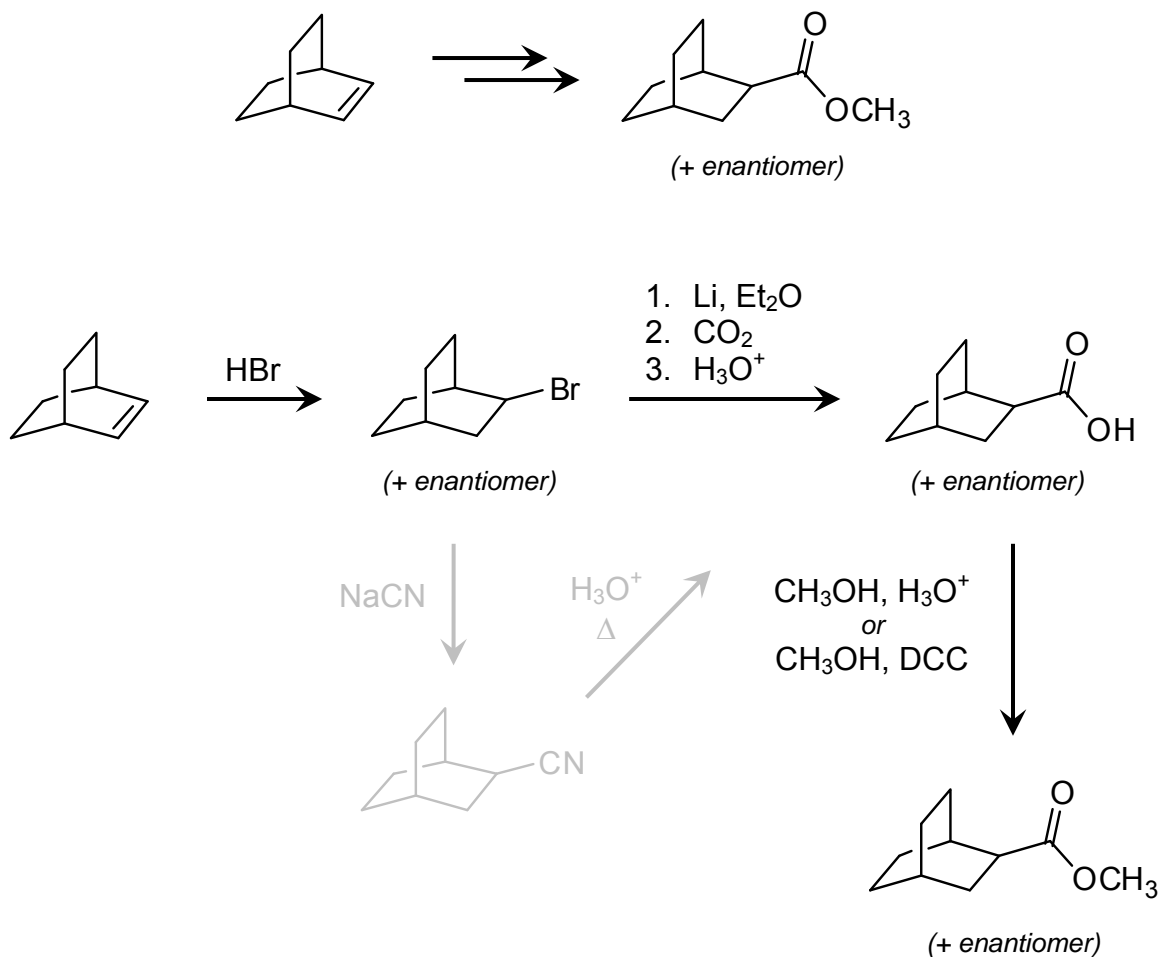
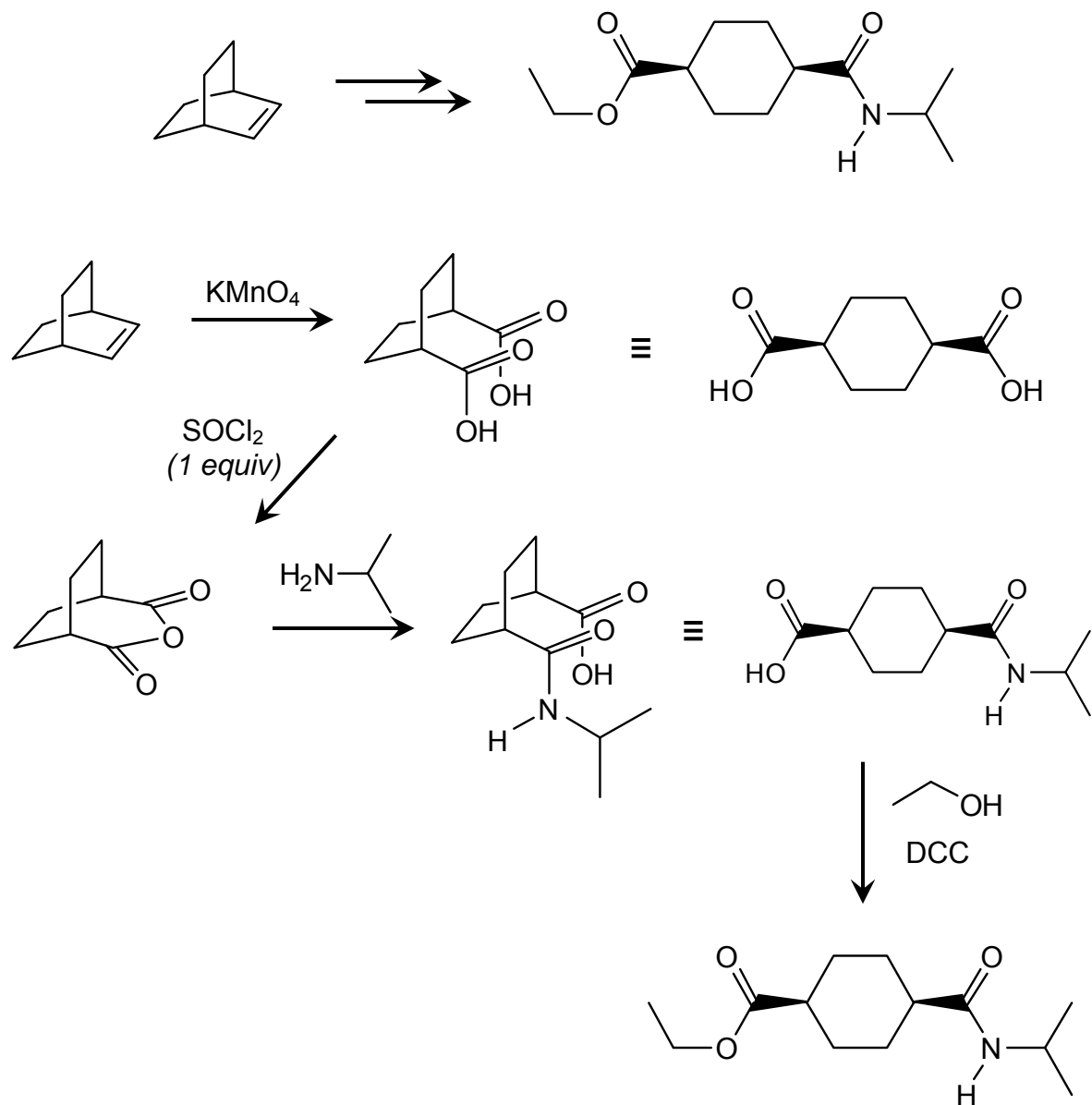


Workshop 14 Solutions
Carboxylic Acids as Synthetic Intermediates



I've drawn one route in gray because I don't think it's as good—more steps, and it involves acid hydrolysis of cyanide, which doesn't actually work that well.



One important thing about forming an anhydride with 1 equivalent of SOCl_2 (step 2) is that the anhydride will only react once with an incoming nucleophile. That insures that the product can have one carboxylic acid derivative on one side, and a different one on the other side.