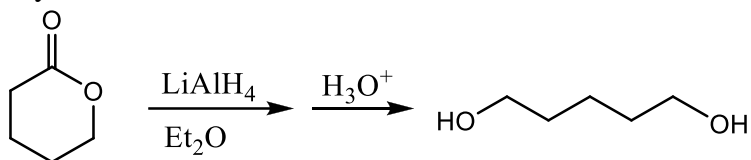
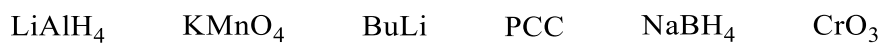


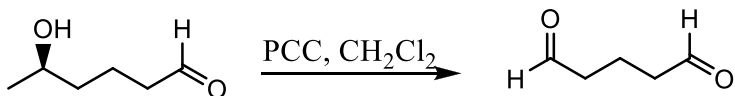
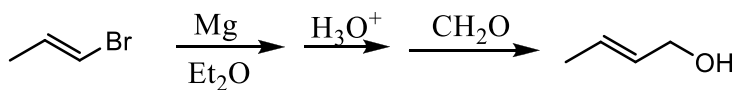
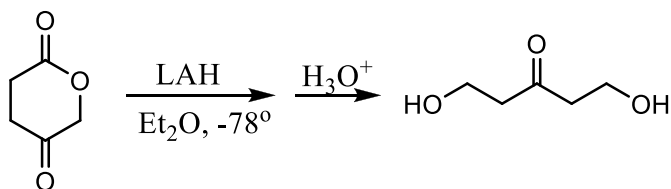
Write out the step-by-step mechanism for the reaction below. Include all intermediates, charges and curved arrows in your mechanism.



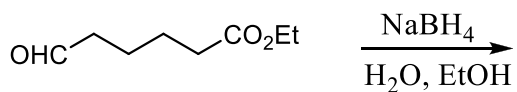
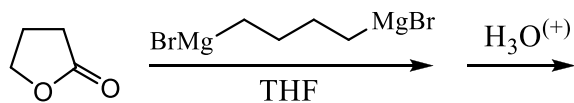
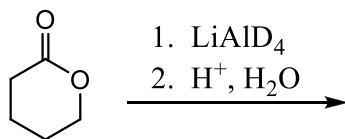
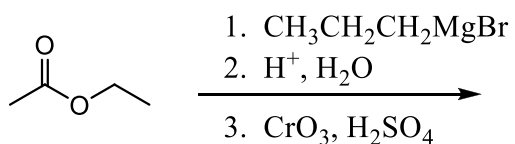
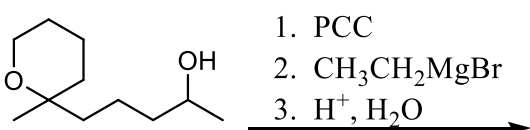
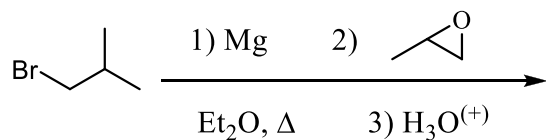
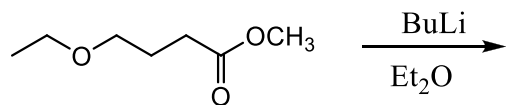
Decide if the compounds below are oxidizing agents or reducing agents/nucleophiles.



What is wrong (if anything) with each reaction below?



Give the major product(s) of the following reactions.



Give the reagents needed to transform the following starting materials into the indicated products.

