

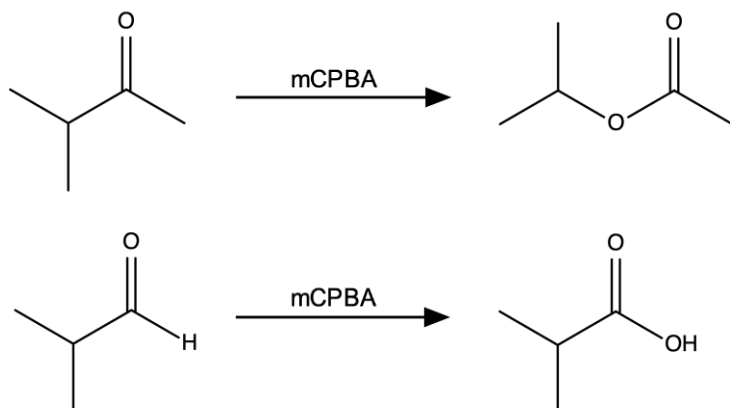
CONCEPT: BAEYER-VILLIGER OXIDATION

Peroxyacids (RCO_3H) have the ability to convert ketones into _____ and aldehydes into _____.

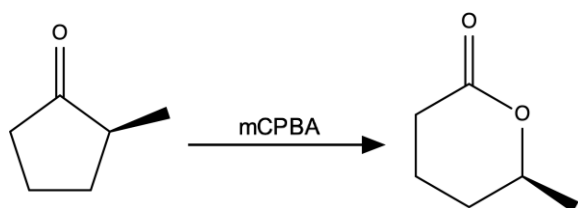
- This oxidation is *regioselective* based on the **migratory aptitude** of the groups attached to the carbonyl carbon

□ The migratory aptitude follows the cation stability trend: $\text{H} > 3^\circ\text{C} > 2^\circ\text{C} > \text{aryl} > 1^\circ\text{C}$

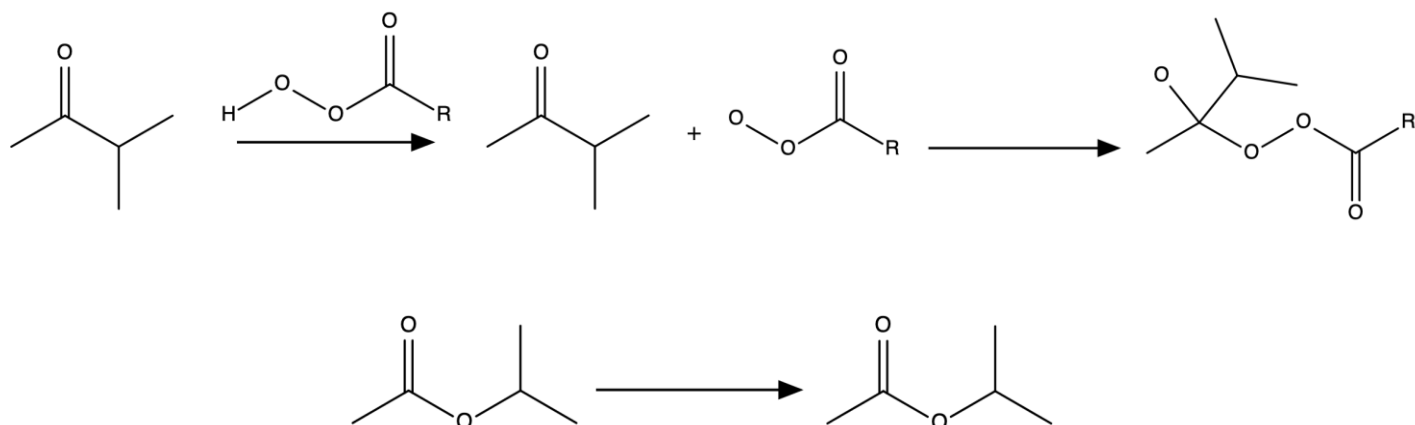
General Reaction:



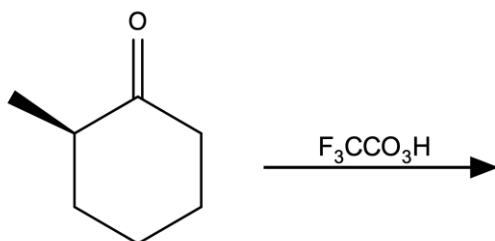
- Stereochemistry of migrating group is retained



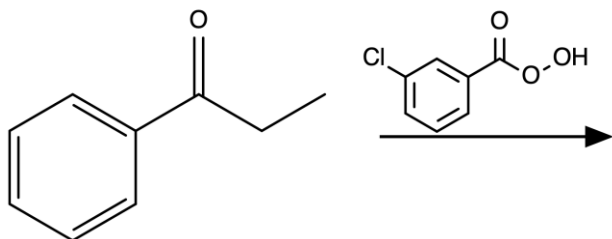
Mechanism:



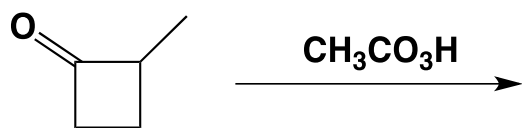
PRACTICE: Predict the major product of the following reaction



PRACTICE: Show the mechanism and predict the product for the following reaction



PRACTICE: Determine the major product for the following reaction.



PRACTICE: Provide the necessary reagents for the following transformation.

