Discussion Worksheet #12

Multistep Synthesis With addition Reactions

Skill 1: Know your reagents!

* There is no shortcut here-just know the reagents for functional group transformations

Problem 1. Provide reagents necessary to affect the following transformations.



Skill 2: Use retrosynthesis to plan new carbon carbon bond forming reactions

* Compare the starting material to the final product
* Find where the new C-C bond needs to be made
* Plan an intermediate to make that new carbon-carbon bond

Problem 2. Plan a retrosynthesis. Based on the bond disconnect in the final product, take one step back to provide the necessary electrophile, then fill in the reagents needed.



Skill 3: Take regiochemistry and stereochemistry into consideration!

Problem 3 Propose a multistep synthesis starting from the given material. You may use any inorganic reagents and any additional carbon source containing 4 or fewer carbons.

