**The Synthesis Game**

*The team with the highest number of points at the end will each receive a one-time 24 hour extension on a problem set.*

Day 1: Synthesize a molecule from benzene and any other reagents that contain 3 or less carbons. Reagents must be added 4 times but no more than 6. You can only use the reagents we have discussed in class this semester and last semester. Try to incorporate the following motifs if possible.

C-C bond unsaturation that is non-aromatic

heteroatomic functional groups

intramolecular rearrangement

*A technically correct (reagents and products) synthesis will earn your group 3 points with an additional bonus point for each of the motifs above.*

Day 2: Given molecules from the other groups, come up with a viable synthetic route to as many of the molecules as possible.

*Each correct synthetic route will earn your group 3 points and if you accomplish the synthetic route in less steps than the original an additional 2 bonus points.*