Week 2 Worksheet

1. For the following substituent groups that can be attached to a benzene ring, state:
   1) Several examples of the type of group
   2) Whether they are electron-donating or electron-withdrawing
   3) Whether they make it easier or more difficult for additional substituent groups to be added to the benzene ring
   4) Their directing capabilities
   5) Whether they would experience a high or low amount of bromination in reaction

Activating Groups:

Deactivating Groups:

Halogens:

2. Order the following benzene rings in order of increasing bromination reactivity, with (1) being the least reactive and (5) being the most reactive.