1. Indicate whether each of the following species is a Lewis acid, a Lewis base, or both.

c) H—B—H | H

b)

- 2. Write equations showing the Lewis acid-base reaction that takes place in the following reactions. You will need to do a little bit of research (use your book) to find the structures of some of these compounds. Be sure to indicate the Lewis acid and base in each reaction. Also write arrow formalisms for the reactions.
 - a) $CH_3OH + BF_3$
 - b) $CH_3Cl + AlCl_3$
 - c) $CH_3OCH_3 + BF_3$