Hard-Soft Acid-Base Exercise

Before class: Look at the lists of hard, intermediate, and soft classes of acids and bases, and think about the trends you see. This will allow you to remember without memorizing huge lists!

During class: For this time, you will assume the identity of a specific Lewis acid or base (a sheet to be pinned to yourself). Your quest is to find other people, to form as many acid-base reactions as possible, of the form

```
(acid 1)(base 1) + (acid 2)(base 2) --> (acid 1)(base 2) + (acid 2)(base 1)
```

For each reaction, you must:

- Write the reaction.
- Have the two "acids" and the two "bases" each initial your sheet under their acid/base
- State whether the reaction is favorable or unfavorable (K < 1 or K > 1)

The winner will be the person who, in 15 minutes, writes the largest number of reactions with the appropriate K.

You may use your book.

At the end of the time, you should count your number of reactions and write it and your name at the top of your sheet.