## **Chemistry 2301**

## In-Class Exercise: Acid-Base Reactions and "Electron Pushing"

Each of the reactions below shows the combination of a base (on the left) and an acid (on the right). For each combination:

- On each base, draw any lone pairs of electrons that might be donated to a proton.
- Next, "push" one of these electron pairs towards the proton on the acid that will be transferred, by drawing a curved arrow that starts on the electron pair and ends at the proton.
- Draw another curved arrow that shows how the bond that used to attach the proton to the acid is broken.
- Finally, draw the products of the acid base reaction—the conjugate acid and conjugate base—on the right.

$$\bigcirc$$
H + H  $\bigcirc$ CH<sub>3</sub>