Chemistry 2301

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

Here, I've drawn examples of answers you might give. The problem only asked you draw an acid-base reaction, not necessarily the best acid-base reaction, and so there are lots of possible answers here.

In this answer, I've drawn the lone pairs on the oxygen atom explicitly, and started my first electron pushing arrow from one of those lone pairs. (Mainly because the

instructions said so.) But the negative charge symbol on oxygen essentially means "this atom has electron pairs to spare", and so people sometimes push electrons from the negative charge:

Either way of illustrating this is fine. Of course, you can't start an arrow from a positive charge, which indicates a *lack* of electrons.

$$H + H O CH_3$$
 ΘCH_3
 ΘCH_3