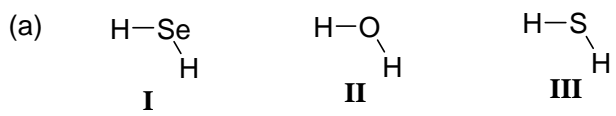
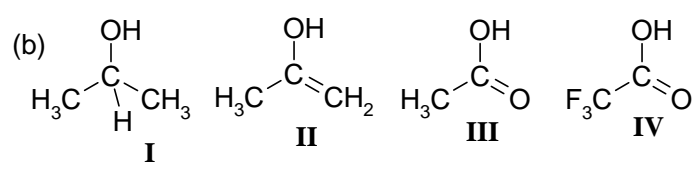
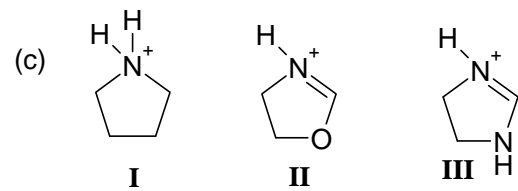
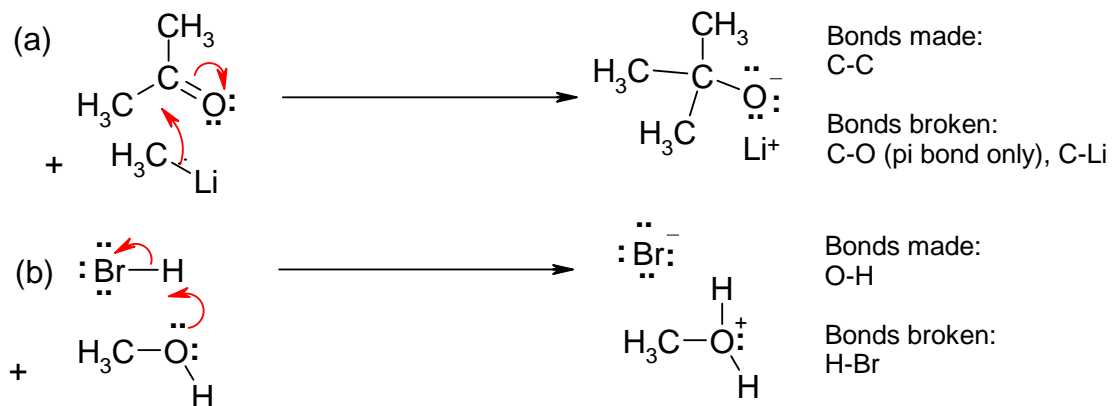


Recitation problems: Acids/bases and Arrow Pushing

1. Rank the following sets of compounds in order of increasing acidity:

	Ranking	Reason(s)
(a) 	$\text{II} < \text{III} < \text{I}$	Size of atom, bond strength, these override electronegativity
(b) 	$\text{I} < \text{II} < \text{III} < \text{IV}$	I cannot do resonance, others can. Electroneg. helps stabilize conj. base of IV more than III more than II.
(c) 	$\text{III} < \text{II} < \text{I}$	Again I cannot do resonance, so that destabilizes the conj acid form making I more acidic. Other two ranked by reson. stabilization, III is the most stable acid form

2. Fill in the arrows for the following reactions:



3. Predict the product of the following reaction, based on the arrows shown:

