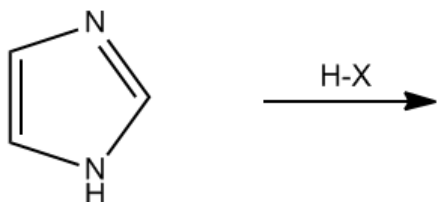


### CONCEPT: BASICITY OF AROMATIC HETEROCYCLES

Heterocycles often have multiple lone pairs available to react with acids. The question is which lone pair do we react?

**EXAMPLE:** Draw the product of the following acid/base reaction with imidazole.



- Acids can only react with lone pairs that are *not necessary for aromaticity*.

□  $sp^2$ -hybridized lone pairs are basic.

**EXAMPLE:** Draw the product of the following acid/base reaction.

