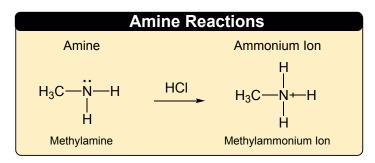
## **CONCEPT: AMINE REACTIONS**

## **Acid-Base Reaction**

- Under this type of reaction an acid reacts with an anime ( \_\_\_\_\_ base)
  - □ Recall, when a base accepts an H<sup>+</sup>, it transforms into a conjugate \_\_\_\_\_.
  - □ \_\_\_\_\_ ion: the conjugate \_\_\_\_\_ form of an amine.
    - For the \_\_\_\_\_ ion modify the ending from \_\_\_\_ to \_\_\_\_



**EXAMPLE**: Predict the products formed from the following reaction between nitric acid and ammonia.

$$HNO_3$$
 (aq) +  $NH_3$  (aq)  $\longrightarrow$  \_\_\_\_\_ (aq) + \_\_\_\_\_ (aq)

**PRACTICE:** Determine the ammonium ion formed in the following reaction between diethylamine and hydrobromic acid.

$$H_3CH_2C$$
— $N$ — $H$   $HBr$ 
 $CH_2CH_3$