## **CONCEPT: REDUCTIVE AMINATION**

Recall that ketones and aldehydes can react with primary amines in acidic conditions to form *imines*.

• This mechanism passed through an important intermediate called an *iminium cation*.

Ketones and aldehydes can be made to form amines instead by using the reducing agent, NaBH<sub>3</sub>CN on the imine.

• This mechanism starts the same, except for the fact that we reduce the imine instead of deprotonating it

**EXAMPLE:** Provide the major product for the following reaction.

Phenylacetone