

GENERAL CHEMISTRY

STANDARD 12.4

DEFINITIONS

- **Neutralization Reaction:** A chemical reaction between an acid and a base and results in the creation of water and a salt
- **Conjugate Acid-Base Pair:** Two species that differ from each other by the presence of one hydrogen ion

EXAMPLES

- Consider the following reactions:



Base

Acid

Conjugate
BaseConjugate
Acid

Acid

Base

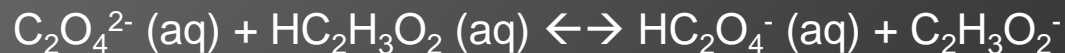
Conjugate
AcidConjugate
Base

The acid and base are always on the right (reactants) side

The conjugate acid and conjugate base are always on the left (product) side

TRY IT YOURSELF

- Consider the following reactions:



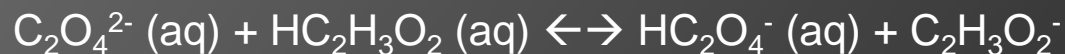
TRY IT YOURSELF SOLUTIONS

- Consider the following reactions:



Acid

Base

Conjugate
AcidConjugate
Base

Base

Acid

Conjugate
AcidConjugate
Base

Acid

Base

Conjugate
AcidConjugate
Base

Acid

Base

Conjugate
AcidConjugate
Base