



Science 30 Unit B: Chemistry – Acid Base Reactions

Name: Key!Date: Feb 4th 2014

Use the Relative Strengths of Selected Acids and Bases table on page 12 of your Data Booklet to answer the following questions.

1. In terms of the gain or loss of protons, define the following:

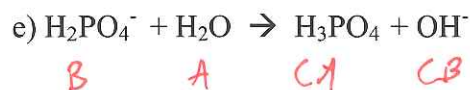
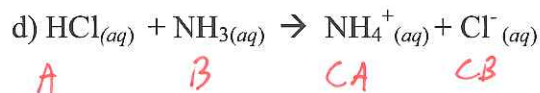
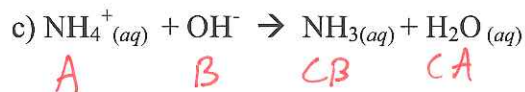
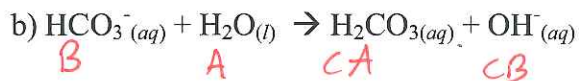
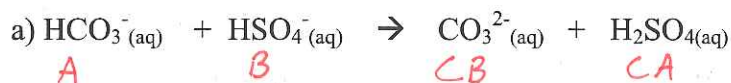
a) acid – loses protons (proton donor)

b) base – gains protons (proton acceptor)

c) conjugate acid - is formed when bases gain a proton.

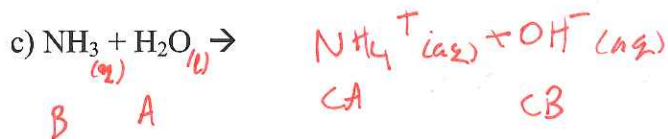
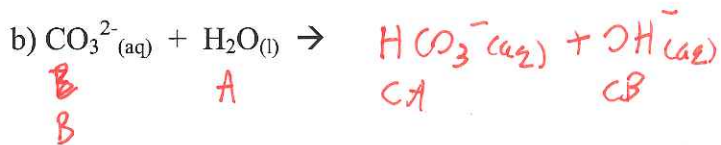
d) conjugate base - is formed when acids lose a proton.

2. Label the acid (A), base (B), conjugate acid (CA) and conjugate base (CB) in the reactions below.



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3. Complete the following equations and label the first reactant as either an acid or a base.



4. Complete the following table. Use page 178 in your textbook to help you.

Oxide	Human-Made Source	Emission (gas) produced	Acid deposited by emission
Carbon	burning coal, natural gas, etc.	CO_2	carbonic acid
Sulfur	burning coal, H_2S in natural gas	SO_2 , SO_3	sulfuric acid / sulfurous acid
Nitrogen	produced by high temp. rxns in	NO_x	nitric acid.

5. Define the term anthropogenic.
↑ people. air.

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- human-caused emissions
.....
pollution
.....