

Name _____



Naming Conjugate Acids and Conjugate Bases

A **conjugate acid** is formed when a base accepts a proton (H^+).

It will always have one more H^+ than the base.

A **conjugate base** is formed when an acid donates a proton (H^+).

It will always have one fewer H^+ than the acid.

Instructions: For each acid or base provided, select the correct conjugate acid or conjugate base from the four options given.

1. The conjugate base of HCl is:

- a) H_2Cl b) Cl^- c) HCl_2 D) H_2O

2. The conjugate acid of OH^- is:

- a) O^{-2} b) H_2O c) H D) HO^-

3. The conjugate base of H_2SO_4 is:

- a) H_3SO_4 b) SO_4^{-2} c) HSO_4^- D) H_2O

4. The conjugate acid of NH_3 is:

- a) NH_2^- b) NH_4^+ c) NH D) N^{-3}

5. The conjugate base of HCO_3^- is:

- a) H_2CO_3 b) CO_3^{-2} c) H_2CO_4 D) CO_3

6. The conjugate acid of F^- is:

- a) F_2 b) H_2O c) HF D) FH^-