4

• Conjugate acid/base pairs exist in aqueous solutions of weak acids. What is the difference between a weak acid and its conjugate base?

How are the strength of a weak acid and its conjugate base related?

From the following list select 2 conjugate acid/base pairs. Identify acid and base in both pairs.

 $H_2PO_4^{\ +} \ H_2CO_3 \ H_2PO_4^{\ -} \ H_2SO_4 \ HPO_4 \ SO_4^{\ 2-} \ H_3PO_4 \ HCO_3^{\ -} \ HPO_4^{\ 2-}$