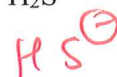
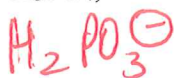
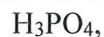


1) Write the conjugate base for the following acids:



2) Write the conjugate acid for the following bases:



3) Identify the acid-base and conjugate acid/conjugate base pair in the following equations.



4) Circle the stronger acid in the following pairs:

5) Calculate the pH, pOH, $[H_3O^+]$ or $[OH^-]$ concentrations as indicated in the problem:

a) pH for 0.65 M HBr

$$-\log [0.65] = 0.19$$

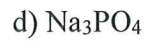
b) pOH for 0.073 M LiOH

$$-\log [OH^-] = -\log [0.073] = 1.14$$

c) pH for 0.070 M KOH

d) $[H_3O^+]$ for lemonade, pH 2.91e) $[OH^-]$ for blood plasma, 7.42

6) Classify the following as acidic, basic or neutral salts:



7) Identify the Lewis acid and the base in the following reactions.



6) Classify the following as acidic, basic or neutral salts:

a) LiCl

neutral

b) KNO₃

neutral

c) NH₄Cl

acidic

d) Na₃PO₄

basic

7) Identify the Lewis acid and the base in the following reactions.

