

## CHEMISTRY pH PRACTICE

$$[\text{H}^+][\text{OH}^-] = 10^{-14} \text{ M}$$

$$\text{pH} + \text{pOH} = 14$$

- 1) In your own words, describe what pH measures.
- 2) What is the largest numerical value possible for pH?
- 3) What is the smallest numerical value possible for pH?
- 4) What is the numerical value for a neutral pH?
- 5) Is a pH of 6.7 a strong or weak acid? Why?
- 6) Is a pH of 13.1 a strong or weak base? Why?
- 7) A solution has  $[\text{OH}^-]$  of  $1.0 \times 10^{-9} \text{ M}$ .
  - a) Find  $[\text{H}^+]$ .
  - b) Find the pH.
  - c) Find the pOH.
  - d) Is the solution ACID, BASE, or NEUTRAL?
- 8) A solution has  $[\text{H}^+] = 1.0 \times 10^{-11} \text{ M}$ .
  - a) Find  $[\text{OH}^-]$ .
  - b) Find the pOH.
  - c) Find the pH.
  - d) Is the solution ACID, BASE, or NEUTRAL?
- 9) A solution has a pOH of 8.
  - a) Find the pH.
  - b) Find  $[\text{H}^+]$ .
  - c) Find  $[\text{OH}^-]$ .
  - d) Is the solution ACID, BASE, or NEUTRAL?
- 10) A solution has  $[\text{H}^+] = 1.0 \times 10^{-7} \text{ M}$ .
  - a) Find  $[\text{OH}^-]$ .
  - b) Find the pOH.
  - c) Find the pH.
  - d) Is the solution ACID, BASE, or NEUTRAL?