

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Strong Acids and Bases

1. Calculate the pH of a solution with  $[H^+] = 5 \times 10^{-5}$  M.

$$pH = 4.3$$

2. Calculate the pH of a solution with  $[H^+] = 1$  M.

$$pH = 0$$

3. Calculate the pH of a 0.01 M solution of HCl.

$$pH = 2$$

4. Calculate the pH of a 0.05 M solution of NaOH.

$$pH = 1.30$$

5. Calculate the pH of a  $7.5 \times 10^{-6}$  M solution of  $Mg(OH)_2$ .

$$pH = 9.176$$

6. Find  $[H^+]$  of a solution with  $pH = 3$ .

$$[H^+] = 10^{-3} \text{ M}$$