

Name \_\_\_\_\_

## Ions in Acids and Bases Answer Key

1. Dilution refers to the process of reducing the concentration of a solution by adding more solvent.
2. The chemical formula for nitric acid is  $\text{HNO}_3$ .
3. The pH is 1. (Note:  $\text{pH} = 14 - \text{pOH}$ )
4. An amphiprotic substance is one that can act as both an acid and a base, depending on the reaction conditions.
5. In an acidic solution, the concentration of hydrogen ions is greater than the concentration of hydroxide ions.
6. A burette is used to deliver precise volumes of one solution into another during the titration process.
7. The pOH is 6. (Note:  $\text{pOH} = -\log[\text{OH}^-]$ )
8. The pH is 8. (Note:  $\text{pH} = 14 - \text{pOH}$ )
9. Acid rain refers to rainwater or any precipitation with a pH lower than the neutral value of 7, primarily caused by air pollutants reacting with water in the atmosphere.
10. Buffering capacity refers to the ability of a solution to resist changes in pH when small amounts of acid or base are added to it.