

# Acids & Bases

## Across

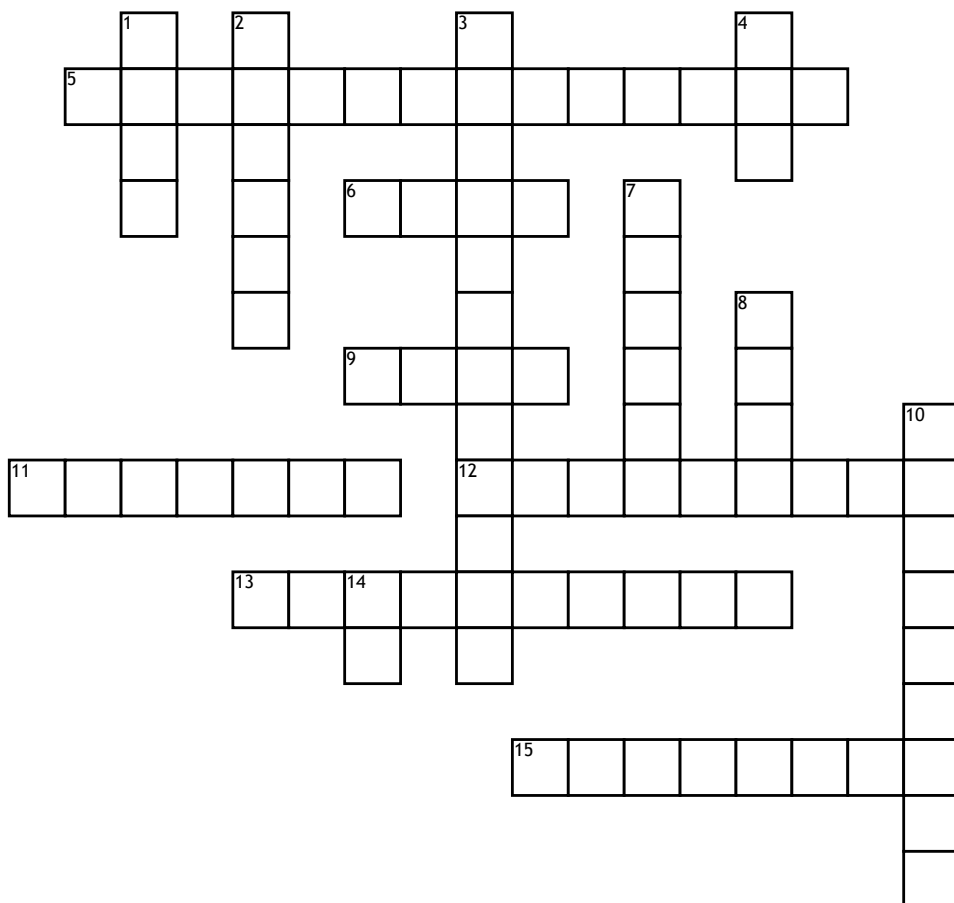
5. A reaction between an acid and a base to form water and a salt

6. A substance that dissolves in water and produces hydroxide ions (OH<sup>-</sup>) according to the Arrhenius theory. All bases are hydrogen ion acceptors, according to the Brønsted-Lowry theory.

9. A substance that dissolves in water and produces hydrogen ions (H<sup>+</sup>), according to the Arrhenius theory. All acids are hydrogen ion donors, according to the Brønsted-Lowry theory.

11. The term that describes a solution with equal concentrations of [H<sub>3</sub>O<sup>+</sup>] and [OH<sup>-</sup>].

12. The addition of base to an acid sample to determine the concentration of the acid.



13. Substances that can act as either an acid or a base in water.

15. The point at which an indicator changes color. For the indicator phenolphthalein, the color change occurs when the number of moles of OH<sup>-</sup> is equal to the number of moles of H<sub>3</sub>O<sup>+</sup> in the sample.

## Down

1. A base that is a poor acceptor of H<sup>+</sup> and produces only a small number of ions in water.

2. An acid that completely dissociates in water.

3. The separation of an acid or a base into ions in water

4. A measure of the [OH<sup>-</sup>] in a solution; pOH = -log[OH<sup>-</sup>].

7. A solution of a weak acid and its conjugate base or a weak base and its conjugate acid that maintains the pH by neutralizing added acid or base.

8. An ionic compound that contains a metal ion or NH<sub>4</sub><sup>+</sup> and a nonmetal or polyatomic ion other than OH<sup>-</sup>.

10. A substance added to a titration sample that changes color when the pH of the solution changes.

14. A measure of the [H<sub>3</sub>O<sup>+</sup>] in a solution; pH = -log[H<sub>3</sub>O<sup>+</sup>].

