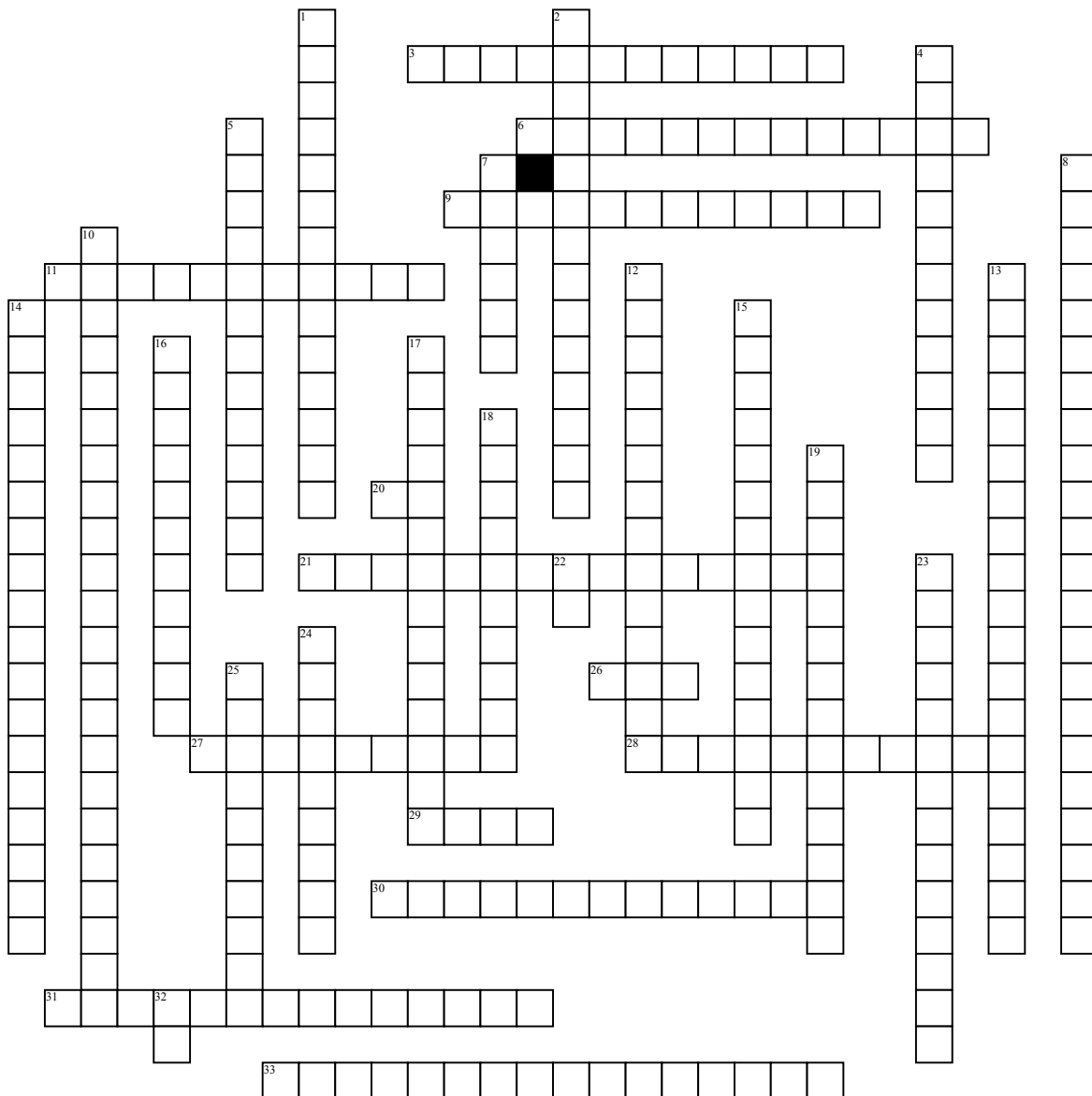


Sphan crossword puzzle by zackary



Across

- 3. H₃O⁺ (can be used interchangeably with H⁺)
- 6. The species produced when an acid donates a hydrogen ion to form a base.
- 9. A polyprotic acid that has two acidic H⁺ ions. An example is H₂SO₄.
- 11. pOH = -log[OH⁻]
- 20. A measure of the strength of an acid or base solution which is based on the amount of H⁺ ion.
- 21. Have pH < 7
- 26. A measure of the strength of an acid or base solution which is based on the amount of OH⁻ ion.
- 27. Bases that ionize only partially in dilute aqueous solution to form the conjugate acid and hydroxide ions.
- 28. Bases that dissociate entirely into metal ions and hydroxide (OH⁻) ions in aqueous solution (Arrhenius base).
- 29. an ionic compound made from the cation from a base, and an anion from an acid

- 30. A polyprotic acid that has three acidic H⁺ ions. An example is H₃PO₄.
- 31. Acid contains H and dissociates to produce H⁺ ions in aqueous solution, while a base contains OH and dissociates to produce OH⁻ ions in aqueous solution.
- 33. Have pH = 7

Down

- 1. An acid that has two or more acidic H⁺ ions.
- 2. An acid that has only one acidic H⁺ ion.
- 4. When acids and bases ionize - fall apart - in solution to form electrolyte solutions.
- 5. The species produced when a base accepts a hydrogen ion to form an acid.
- 7. An indicator that is used to determine if a solution is acidic or basic. Red litmus turns blue for bases, while blue litmus turns red for acids.
- 8. A reaction in which an acid and a base in an aqueous solution react to produce a salt and water.
- 10. Two substances related to each other by the donating and accepting of a single H⁺ ion.

- 12. Have pH > 7
- 13. A substance which can behave as either a B/L acid or a B/L base, depending on the circumstances. Water is the prototypical amphoteric substance.
- 14. An acid is defined as a hydrogen-ion donor and a base is a hydrogen-ion acceptor.
- 15. Low pH and high pOH
- 16. Acids that ionize completely in solution.
- 17. A reaction when salt completely dissociates in water, and it's anion or cation react with the water to produce hydroxide ions or hydronium ions that affect the pH of the solution.
- 18. Chemicals that change color in the presence of acids or bases.
- 19. HCl HBr HI H₂SO₄ HClO₄ HNO₃
- 22. HYDROXIDEION
- 23. Low pOH and high pH
- 24. Acids that only ionize partially in solution.
- 25. pH = -log[H⁺]
- 32. Hydrogen ion