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Acids & Bases

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| **Across**  **4.** Have pH = 7  **6.** pH = -log[H+]  **8.** Acids that ionize completely in solution.  **9.** Chemicals that change color in the presence of acids or bases.  **11.** Acids that only ionize partially in solution.  **15.** The species produced when a base accepts a hydrogen ion to form an acid.  **16.** pOH = -log[OH-]  **18.** Low pOH and high pH  **19.** 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.  **20.** The species produced when an acid donates a hydrogen ion to form a base.  **21.** 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.  **22.** Low pH and high pOH | **Down**  **1.** OH-  **2.** When acids and bases ionize - fall apart - in solution to form electrolyte solutions.  **3.** H3O+ (can be used interchangeably with H+)  **5.** A measure of the strength of an acid or base solution which is based on the amount of H+ ion.  **7.** Have pH < 7  **10.** Have pH > 7  **12.** H+  **13.** Bases that ionize only partially in dilute aqueous solution to form the conjugate acid and hydroxide ions.  **14.** A measure of the strength of an acid or base solution which is based on the amount of OH- ion.  **17.** Bases that dissociate entirely into metal ions and hydroxide (OH-) ions in aqueous solution (Arrhenius base). |