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Acids and Bases Worksheet

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| **Across**  **1.** LiOH NaOH KOH Ca(OH)2 Sr(OH)2 Ba(OH)2  **5.** H3O+ (can be used interchangeably with H+)  **6.** 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.  **9.** Low pOH and high pH  **11.** H+  **18.** A measure of the strength of an acid or base solution which is based on the amount of OH- ion.  **19.** Chemicals that change color in the presence of acids or bases.  **20.** Bases that dissociate entirely into metal ions and hydroxide (OH-) ions in aqueous solution (Arrhenius base).  **21.** An acid that has two or more acidic H+ ions.  **23.** Have pH = 7  **24.** 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.  **26.** HCl HBr HI H2SO4 HClO4 HNO3  **27.** pOH = -log[OH-]  **28.** Two substances related to each other by the donating and accepting of a single H+ ion.  **29.** Have pH > 7 | **Down**  **2.** Have pH < 7  **3.** 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.  **4.** The species produced when a base accepts a hydrogen ion to form an acid.  **7.** Acids that ionize completely in solution.  **8.** An acid is defined as a hydrogen-ion donor and a base is a hydrogen-ion acceptor.  **10.** The species produced when an acid donates a hydrogen ion to form a base.  **12.** An acid that has only one acidic H+ ion.  **13.** Low pH and high pOH  **14.** OH-  **15.** Bases that ionize only partially in dilute aqueous solution to form the conjugate acid and hydroxide ions.  **16.** pH = -log[H+]  **17.** Acids that only ionize partially in solution.  **22.** When acids and bases ionize - fall apart - in solution to form electrolyte solutions.  **25.** A measure of the strength of an acid or base solution which is based on the amount of H+ ion. |