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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. |