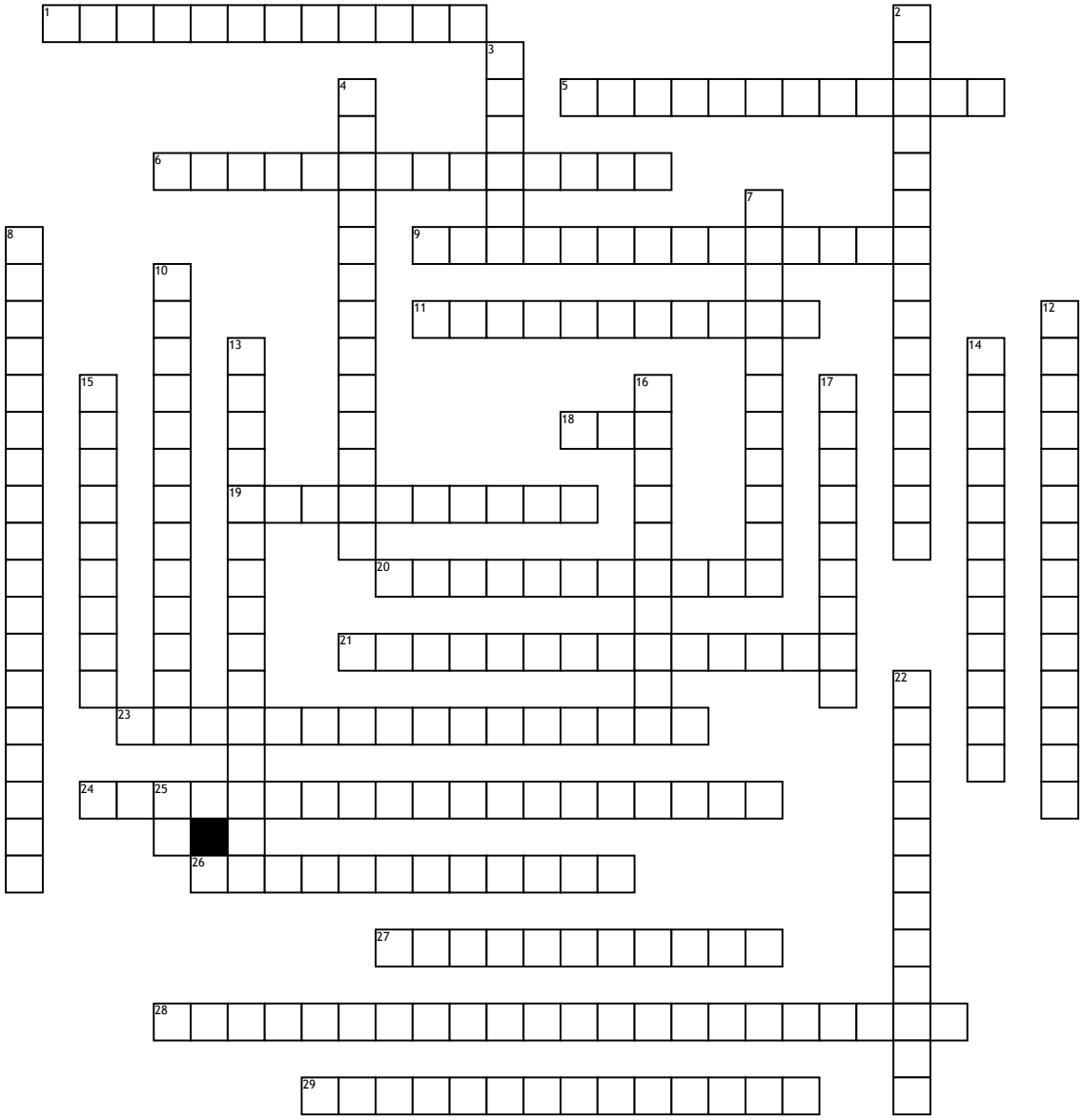
Name: _____ Date: _____

Acids and Bases Worksheet



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.