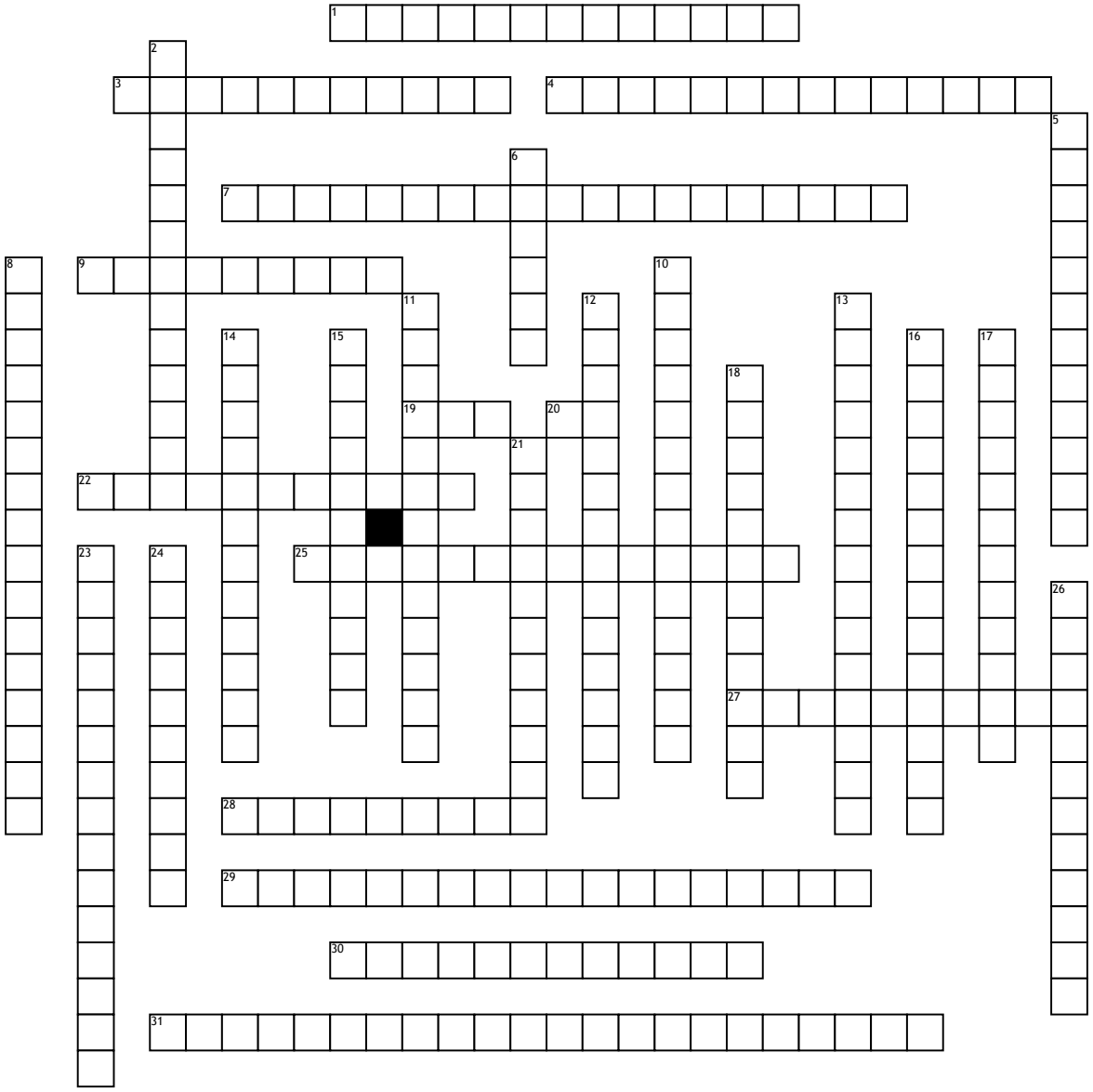
Name: _____ Date: _____

acids and bases 1



Across

1. The species produced when an acid donates a hydrogen ion to form a base.

3. pOH = -log[OH-]

4. Low pOH and high pH

7. A substance which can behave as either a B/L acid or a B/L base, depending on the circumstances.

9. Bases that ionize only partially in dilute aqueous solution to form the conjugate acid and hydroxide ions.

19. A measure of the strength of an acid or base solution which is based on the amount of OH- ion.

20. A measure of the strength of an acid or base solution which is based on the amount of H+ ion

22. H+

25. Have pH > 7

27. Chemicals that change color in the presence of acids or bases.

28. Acids that only ionize partially in solution.

29. An acid is defined as a hydrogen-ion donor and a base is a hydrogen-ion acceptor.

30. LiOH NaOH KOH Ca(OH)2 Sr(OH)2 Ba(OH)2

31. Two substances related to each other by the donating and accepting of a single H+ ion.

Down

2. The species produced when a base accepts a hydrogen ion to form an acid.

5. A polyprotic acid that has two acidic H+ ions. An example is H2SO4.

6. 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. Have pH = 7

10. An acid that has two or more acidic H+ ions.

11. A polyprotic acid that has three acidic H+ ions. An example is H3PO4.

12. 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.

13. Low pH and high pOH

14. H3O+ (can be used interchangeably with H+)

15. Acids that ionize completely in solution.

16. An acid that has only one acidic H+ ion

17. OH-

18. HCl HBr HI H2SO4 HClO4 HNO3

21. Bases that dissociate entirely into metal ions and hydroxide (OH-) ions in aqueous solution (Arrhenius base).

23. Have pH < 7

24. pH = -log[H+]

26. When acids and bases ionize - fall apart - in solution to form electrolyte solutions