

# Properties of acids and bases

Name \_\_\_\_\_

Write "acidic" or "basic" or "both acidic and basic" or "neutral" to indicate if the property describes a solution that is an acid, a base, both or neutral.

A B N

- |  |                 |
|--|-----------------|
| 1. A solution has a pH greater than 7.   | 1. <u>B</u>     |
| 2. A solution turns the color of litmus to blue.                                     | 2. <u>B</u>     |
| 3. A solution has a higher concentration of $H_3O^+$ ions than $OH^-$ ions.          | 3. <u>A</u>     |
| 4. A solution has a pH equal to 7.   | 4. <u>N</u>     |
| 5. A solution changes color of indicators.   | 5. <u>Both</u>  |
| 6. A solution is added to water, and the $H^+$ concentration of the water increases. | 6. <u>A</u>     |
| 7. A solution has a higher concentration of hydroxide ion than hydrogen ion.         | 7. <u>B</u>     |
| 8. A solution with equal number of $H^+$ ions to $OH^-$ ions.                        | 8. <u>N</u>     |
| 9. A solution increases the $OH^-$ ion concentration of another solution.            | 9. <u>B</u>     |
| 10. A solution decreases the alkalinity of another solution.                         | 10. <u>A</u>    |
| 11. A solution contains hydrogen ion as the only positive ion.                       | 11. <u>A</u>    |
| 12. A solution undergoes neutralization reaction.                                    | 12. <u>Both</u> |
| 13. A solution reacts with a metal to produce hydrogen gas.                          | 13. <u>A</u>    |
| 14. A solution contains mobile ions that conducts electrical current.                | 14. <u>Both</u> |
| 15. A solution that can turn litmus red.   | 15. <u>A</u>    |
| 16. A substance donates a proton in a reaction.                                      | 16. <u>A</u>    |
| 17. A substance accepts a hydrogen ion in a reaction.                                | 17. <u>B</u>    |
| 18. A substance accepts a hydrogen ion in a reaction.                                | 18. <u>B</u>    |