

Acids and Bases

Book Pages 126 – 131 Questions

Answer individually on YOUR OWN piece of notebook paper!

1. Define "Acid".
2. Define "Base".
3. What happens when acids and bases come in contact with each other?
 - a. What type of reaction is this?
 - b. What are two products in an Acid/Base reaction?
4. What scale is used to measure acidity?
5. Name two foods that contain acids.
6. When do compounds act like acids/bases?
7. How is acid rain formed?
8. Neutral solutions, such as _____, have a pH of ___
9. Why do bases, such as Ivory soap, feel slippery?
10. How do acids taste?
11. What is a safe way to test for an Acid?
12. What determines the strength of an acid or a base?
13. What color does litmus paper turn in the presence of an acid?
14. Why do acids and bases neutralize each other?
15. Where are the following found on the pH chart?
 - a. Strong acids?
 - b. Strong bases?
16. How does the concentration of hydrogen ions change on the pH chart?
17. How do acids feel on your skin?
18. What gas is produced when acids react with metals?
19. What color does litmus paper turn in the presence of a base?
20. Name two places around the home where bases are found.
21. How do bases taste?
22. Name the pH of the following:
 - a. Lemon
 - b. Soap
 - c. Milk
 - d. Pure Water
23. Acidic solutions have a pH below
24. Basic solutions have a pH above
25. Suppose that you have 1 L of an acid solution with a pH of 2. You add 1 L of pure water. What happens to the pH of the solution? Explain!
26. Suppose that equal amounts of solutions of HCl and NaOH with the same concentration are mixed together. What will the pH of the new solution be? What are the products of this reaction?

Acid Base Quiz Study Guide
(Book Pages 126 – 131 Questions and Answers)

1. Define “Acid”. **A Substance that can donate a hydrogen ion**
2. Define “Base”. **A substance that can accept a hydrogen ion**
3. What happens when acids and bases come in contact with each other? **They neutralize each other.**
 - a. What type of reaction is this? **Neutralization Reaction**
 - b. What are two products in an Acid/Base reaction? **Water and a salt.**
4. What scale is used to measure acidity? **pH scale**
5. Name two foods that contain acids. **Citrus fruits and juices, milk,**
6. When do compounds act like acids/bases? **When they are dissolved in water**
7. How is acid rain formed? **When gasses dissolve in water vapor forming acidic solutions.**
8. Neutral solutions, such as **Pure Water**, have a pH of **7**.
9. Why do bases, such as Ivory soap, feel slippery? **They react with acidic molecules in your skin.**
10. How do acids taste? **Sour**
11. What is a safe way to test for an Acid? **Place a few drops on a compound that contains carbonate to see if a reaction occurs**
12. What determines the strength of an acid or a base? **The number of ions produced in the water.**
13. What color does litmus paper turn in the presence of an acid? **Red**
14. Why do acids and bases neutralize each other? **The acid’s “H” joins the base’s “OH” to form water.**
15. Where are the following found on the pH chart?
 - a. Strong acids: **At the bottom (low numbers)**
 - b. Strong bases? **At the top (high numbers)**
16. How does the concentration of hydrogen ions change on the pH chart? **The lower the pH, the more hydrogen ions**
17. How do acids feel on your skin? **Burning or prickling feeling on the skin.**
18. What gas is produced when acids react with metals? **Hydrogen**
19. What color does litmus paper turn in the presence of a base? **Blue**
20. Name two places around the home where bases are found. **Drain cleaner, soap, shampoo, ammonia**
21. How do bases taste?
22. Name the pH of the following:
 - a. Lemon **2**
 - b. Soap **10**
 - c. Milk **6.5**
 - d. Pure Water **7**
23. Acidic solutions have a pH below **7**
24. Basic solutions have a pH above **7**

25. Suppose that you have 1 L of an acid solution with a pH of 2. You add 1 L of pure water. What happens to the pH of the solution? Explain! It rises because water's pH is 7, so combined the solution would have a pH of 4.5.
26. Suppose that equal amounts of solutions of HCl and NaOH with the same concentration are mixed together. What will the pH of the new solution be? What are the products of this reaction? The new pH would be 7 and the products would be water and sodium chloride (NaCl)