

name: _____

your score: _____

Practice Test for Acids and Bases - 5 points each

1. What is a hydronium ion?
2. What are the 2 products of every Arrhenius Acid + Arrhenius Base neutralization?
3. Most acid base indicators are _____
4. When sulfuric acid is in the beaker, the only negative ion in solution would be _____.
5. When vinegar is in your beaker, name 4 ways to describe the only positive ion present.
6. Which of the acids in table K is monoprotic, diprotic, or triprotic?
7. In an alternate theory of acids and bases, a base is a substance that can...
8. In an alternate theory of acids and bases, an acid a compound that can...
9. When you add bromcresol green to a solution with pH of 4.5, what color is expected?
10. When you add phenolphthalein to a solution of carbonated water, what color is expected?
Name one solution could you add to change that color?
11. You neutralize 25.00 mL of 2.28 M hydrochloric acid with 20.0 mL calcium hydroxide solution. What is the molarity of the base here?
12. Write the balanced chemical equation for what happens when you eat tums (calcium hydroxide) for an upset stomach (excess stomach acid that is HCl).
13. Skip this one.
14. If your solution is 10,000 x more acidic than mine is, and my solution has pH 6.2, what's your solution's pH?
15. If a solution with a pH of 5.0 has a H^{+1} concentration of $1 \times 10^{-5.0}$ moles H^{+1} /liter, describe in terms of H^{+1} concentration, what strength is a solution with pH 1.43?
16. If another solution has a H^{+1} concentration of $1 \times 10^{-2} [H^{+1}]$, what's the solution's pH?
17. How many hydroxide ions would it take to neutralize the solution in question 16?
18. If 305. mL of 4.11 M H_2SO_4 is used to neutralize 1234 ml of KOH, what's the base molarity?
19. Show the chemical reaction of ammonia going into water that explains how $NH_{3(AQ)}$ is a base. It will take arrows and labels and maybe a few sentences as well.
20. Acid rain is causing problems in the soil, plants don't grow as well with acidic soils. What solid compound can farmers put onto their ground to help neutralize some of that acid?
21. Make up one problem for acid base titration, and solve it.