Acids/Bases/Phases of Matter Review

Acids/Bases

1. Define solution
2. Differentiate solvent and solute (in addition to the textbook, use other sources to define solute and solvent)
3. In our paper chromatography lab, what was the solvent? solute?
4. Define acid and base.
5. List the properties of acids. (p.394)
6. List the properties of bases. (p.395)
7. What is the chemical formula of hydronium ion? hydroxide ion?
8. Based on a chemical equation, determine whether a reaction produces a base or an acid solution. Hint. On the product side of the equation, what ion is present?
9. Strength of an acid depends on the concentration of _____ the acid produces when dissolved in _____.
10. Strength of an acid depends on the concentration of _____.
11. What is the range of pH scale?
12. Know the strength of the acid or base given a pH number. For example, which is a stronger acid? 2 or 6?
13. What happens to red and blue litmus paper when there is base, acid or water?
14. Explain why your blood pH drops when you hold your breath.
15. Dissolved CO_2 in blood produces a weak _____,
16. Hyperventilating is caused by _____,
17. Salt is produced when a base and an acid combine together to _____ each other.

Phases of Matter

18. What are the phases of matter?
19. Which phase has the fastest moving molecules? slowest?
20. At what temperature does water boil? freeze?
21. On the heating curve of water, what happens to the energy at 0° and 100° C?
21. Compactness is another word for _____.
22. The density of water decreases when it freezes because the water molecules e_____.
23. Explain why water is a polar molecule.
24. Draw a diagram that illustrates how liquid water molecules will align themselves.
25. Draw at least 10 water molecules. Be sure to label the charges.
26. _____ is when a liquid changes into a gas , while when it changes back into a liquid, it is called _____.
27. Define sublimation.