Name: _____ N.B. p. _____

Ch 8 Study Guide Single/Science

1. What is a solution?

2. Name & define 2 parts of a solution.

3. Solutions that are mixed evenly may be referred to as _____.

4. Name 2 ways a suspension is different from a solution.

5. Describe the difference in each as they enter a solution:
   --ionic compounds --covalent compounds

6. Describe how each can change the property of a solvent once a solute is added:
   --freezing point --boiling point

7. Define each:
   --diffusion

   --osmosis

   --permeable

   --selectively permeable

8. In diffusion, molecules spread from an area of _____ to _____ concentration.
9. Draw/explain what happens to a cell when placed into each type of solution:
   --hypotonic --hypertonic --isotonic

10. Explain how you could:
    --increase the concentration of a solution=
    --decrease the concentration of a solution=
    --dilute a solution=

11. A _____ solution holds the maximum amount of a solute at a certain temperature.
12. A _____ contains more solute that can be dissolved at a certain temperature.

13. Which type of solution mentioned in #11-12 may you observe the presence of a precipitate?

14. Describe how solubility changes for each condition:

| | *Solids* | *Gases* |
|---|---|---|
| *Increase temperature* | | |
| *Decrease temperature* | | |
| *Increase pressure* | | |
| *Decrease pressure* | | |

15. Polar molecules dissolve in _____ solvents. Give an example of this: _____
16. Nonpolar molecules dissolve in _____ solvents. Give an example of this: _____

17. Acids _____ hydrogen ions. Give examples & describe the properties of acids:

18. Bases _____ hydrogen ions. Give examples & describe properties of bases.

19. _____ acids & bases break apart *completely* into ions. _____ acids & bases *do not* break apart completely into ions.
20. Describe how the strength of acids & bases can be measured.

21. On the pH scale, acids have a pH of _____ & bases have a pH of _____. Neutral compounds have a pH of _____.

22. When an acid or base is neutralized, it forms a _____& _____.

23. What is an alloy?

How is an alloy made?

Give an example of an alloy.