

## Chemistry B - Unit 3 Review Sheet

1. What are the 6 parts of the Kinetic-Molecular theory?
2. What are the 4 factors that the behavior of a gas depends on?
3. What does STP stand for and what are the numbers?
4. Explain Boyle's law, give the formula and give an example.
5. Explain Charles' law, give the formula and give an example.
6. Explain Avogadro's law and Dalton's law.
7. What is the ideal gas law and what does each variable represent?
8. How does the Kinetic-Molecular theory apply to liquids and solids?
9. What is the difference between intermolecular and intramolecular forces?
10. What are 2 types of intramolecular forces?
11. List 3 types of intermolecular forces from weakest to strongest.
12. What is viscosity and how is it affected by temperature?
13. What causes surface tension?
14. What is specific heat, and give one example of how water's high specific heat affects our lives.
15. What is the difference between a solvent and a solute? Give an example of each.
16. Explain the phrase, "Like dissolves like" using the terms polar, nonpolar, water, sugar and oil.
17. Describe the difference between a crystalline solid structure and an amorphous solid structure.
18. Name, describe and give examples of 4 types of solids.
19. Name 3 types of solutions and give an example of each.
20. What is molarity?
21. If you add 100g of NaCl to 1L of water, what will be the molarity of your NaCl solution?
22. If you want to make 1L of a 0.5M NaOH solution, what mass of NaOH will you need to add to the 1L of water?
23. What is the range of the pH scale? What numbers represent acids? Bases?
24. What is the Bronsted-Lowry definition of acids? Bases?
25. What are buffers?
26. What is the formula that shows the relationship between the molarities and volumes of 2 substances in a titration?
27. What is the molarity of an acid if 4.5mL of a 1.3M base is needed to titrate 5mL of the acid in phenolphthalein?