IPS Chapter-1 Volume and Mass

"I Can" Statements

- 1. Access, navigate, and utilize all course related websites: <u>WebAssign.net</u>, <u>Classroom.google.com</u>, <u>Chemistrybyscott.org</u>, <u>& Celinaschools.org</u>.
- 2. Follow and interpret all the rules on the "Science Laboratory Safety Agreement".
- 3. Access and use and google docs for class assignments and lab reports.
- 4. Properly operate and safely assemble ordinary science lab equipment such as: inserting glass tubing into a rubber stopper, collecting gas by water displacement, lighting and adjusting a flame on a Bunsen burner, assembly and adjustment of various common clamps, rings, tubing, and support equipment used in the chemistry lab.
- Make detailed qualitative observations while carrying out a laboratory experiment.
- 6. Convert from any metric prefix to another between pico and Giga.
- 7. Measure length using a ruler.
- 8. Measure volume using a graduated cylinder.
- 9. Tell how many significant figures are in a number.
- 10. Calculate properly (add, subtract, multiply, divide) using significant figures.
- 11. Round numbers using the even rule.
- 12. Write any mathematical value in scientific notation.
- 13. Enter scientific notation values into a scientific calculator.
- 14. Use values expressed in scientific notation in calculations.
- 15. Correctly measure mass using either a mechanical balance or an electronic balance.
- 16. Measure the volume of air space found in a particulate structure of solid such as sand.
- 17. Recognize that if a solid dissolves in a liquid, the volume may not be conserved; and that when rock salt dissolves in water the total volume decreases.
- 18. Describe the basic operation of an equal arm balance.
- 19. Correlate the proper functions of an electronic balance to the mass readings produced by successively adding masses that are less than the minimum sensitivity of the balance.