**WP Chemistry Unit 1 – Measurement:**

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| **Day:** | **What You Should Learn Today:** | **Class Activities:** | **Handouts:** | **Homework (Due Next Class):** |
| Day 1 –  Chemistry  Course Expectations | * Course Expectations * Composition Book Setup |  |  | * Purchase Composition Notebook (Graph Lined preferred) |
| Day 2 –  Socratic Seminar | * Chromebook expectations | * Prepare for Socratic Seminar | * Article on Scientific Research | * Read Article |
| Day 3 –  Uncertainty in Measurement | * Measurement * Standard Metric Units * Uncertainty in Measurement | * Notes on Measurement * Read article on measurement |  | * Write a letter to the president about why we should change to the metric system. |
| Day 4 –  Notes on Temperature | * Temperature | * Discuss Letters to president |  | * Temperature conversion activity |
| Day 5 –  Significant Figures | * Accuracy vs. Precision * How to properly write sig. figs * Dot Right Not Left | * Notes on sig figs | * Bookwork on website | * Read Section 3.2 * Answer Q’s 13-16 on Section review |
| Day 7 –  Measurement Practice | * How to properly set up a lab book * Uncertainty of Measurement in practice | * Measurement Activity continued | * **Measurement Lab** | * Finish Measurement Lab |
| Day 8 –  Measurement Lab Testing day | * Whether or not your estimations were correct * How to write a proper conclusion | * Measurement Lab Analysis |  | * Measurement Lab conclusions |
| Day 9 –  Dimens9onal Analysis | * How to properly use dimensional analysis | * Notes on Dim. Analysis | * DimAn and Density Worksheet | * Begin DimAn and Density Worksheet |
| Day 10 –  Density | * What is density? | * Notes on Density | * WP Truth and Density Lab | * Complete Density Worksheet * Density Pre-lab Questions |
| Day 11 –  Density Lab | * How density is applied in practice | * **Truth and Density Lab** |  | * Finish Density Lab Q’s |
| Day 12 –  Review | * Density Lab Continued * Review of Unit 1 |  | * Homework Summary Sheet * Unit 1 Study guide | * Study Guide (optional for EC) * Homework Summary Sheet |
| Day 13 –  Assessment | * **Unit 1 Measurement Assessment** |  |  |  |

**WP Chem Unit 1 – Measurement:**

**Next Generation Science Standards:**

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| EP 5 - Using mathematics and computational thinking | CCC 4 - Systems and system models. Defining the system under study—specifying its boundaries and making explicit a model of that system—provides tools for understanding and testing ideas that are applicable throughout science and engineering. |

**Learning Targets:**

1. I can practice measuring, recording, and with various calculations
2. I can discover the metric system and its uses in science
3. I can illustrate the idea of uncertainty and measurement error
4. I understand and can apply the concept of significant figures to various problems
5. I learned the concept of dimensional analysis and unit conversions
6. I can utilize density in laboratory situations and apply its multi-dimensional state in various calculations.

**Assessments:**

* Formative: Measurement Lab, Density Lab, Various Worksheets, Socratic Seminar, Whiteboard practice activity, Homework
* Summative: Measurement Test, Problem Solving Test

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|  | **Proficiency:** |
| 1 | Demonstrate the application of basic mathematical and algebraic skills in the demonstrated use of the Factor Label Method, the metrics system and the ability to do conversion factor calculations within the metric system and between English and metric. (tests 1, 5, 6, 7) |
| 2 | Demonstrate the ability to use significant figures, correctly rounding numbers in calculations, and the use of scientific notation. (tests 1, 5, 6, 7) |