**Conceptual Physics Unit 1 – Measurement & Problem Solving:**

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| **Day:** | **What You Should Learn Today:** | **Class Activities:** | **Handouts:** | **Homework (Due Next Class):** |
| Day 1 –  Introduction to Physics  Course Expectations | * Course Expectations | * Learn about expectations |  | * Purchase Composition Notebook (Graph Lined preferred) |
| Day 2 –  Socratic Seminar |  | * Prepare for Socratic Seminar | * Article on Scientific Research | * Read Article |
| Day 3 –  Measurement and Problem Solving | * Measurement   Uncertainty in Measurement | * Notes on Measurement * Video on engineering fails |  | * Reflection on why measurement is important |
| Day 4 –  Significant Figures | * Accuracy vs. Precision * Significant Figure rules | * Notes on sig fig rules * Dot Right Not Left | * Measurement and Uncertainty Worksheet | Finish Measurement Worksheet |
| Day 5 –  Measurement Lab | * Lab Expectations * Measurement Lab | * Work on Lab in groups * Paper Tower Competition | * Paper Tower Lab handout | * Finish Lab Sheet |
| Day 6 –  Dimensional Analysis | * Standard Metric Units and Conversions | * Notes on dimensional analysis | * Dimensional Analysis group practice | * Finish DimAn worksheet |
| Day 7 –  Problem Solving Practice | * How to engage in multi-step dimensional analysis problems | * Whiteboard Activity |  | * None |
| Day 8 –  Review | * Prepare for assessment | * Review activity | * Homework summary sheet * Study guide | * Prepare for exam |
| Day 9 – | * **Unit 1 Measurement Assessment** |  |  |  |

**Unit 1 – Measurement & Problem Solving:**

**Next Generation Science Standards:**

1. **Since physics builds from unit to unit, it is necessary to have a general knowledge base of scientific principles. This unit will provide the framework for all other units and standards within this classroom.**

**Learning Targets:**

1. I can practice measuring, recording, and with various calculations
2. I discovered the metric system and can apply its uses in science
3. I can illustrate the idea of uncertainty and measurement error
4. I understand and apply the concept of significant figures to various problems
5. I have learned the concept of dimensional analysis and unit conversions

**Assessments:**

* Formative: Various Worksheets, Socratic Seminar, Whiteboard dimensional analysis practice activity, Homework,
* Summative: Measurement Test