**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 PhysicsCourse 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**
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**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