**Physical Science**

**Unit 1: Introduction to Physical Science**

**Learning Targets:**

* 1.1 - I can measure various objects using nontraditional measurement tools as well as traditional measurement tools.
* 1.2 - I can determine the dependent variable and independent variable in given situations and write statements describing the relationship between the two variables.
* 1.3 - I can graph data and write a science equation that best fits the data.

**Essential Vocabulary:**

* Physics
* Chemistry
* Observation
* Hypothesis
* Theory
* Law
* Experimental design
* Scientific reasoning
* Line of best fit
* Data
* Conclusion
* Variable
* Independent Variable
* Dependent Variable
* Control Variable
* Qualitative
* Quantitative
* Mass
* Length
* Density
* Volume

**Assignments**

|  |  |
| --- | --- |
| **Assignment Name** | **Grade/ Comments** |
| Bell Ringers (Unit 1) |  |
| Measurements Activity |  |
| Density & Measurements Lab |  |
| Density Practice Problems |  |
| HW- Independent Practice |  |
| Essential Questions |  |
|  |  |
|  |  |
|  |  |
| **Notebook Check Grade** |  |

**Essential Questions Writing Prompts:**

1. How do we know which measuring device to use?
2. What type of questions and hypotheses can be answered by science?
3. How do we know if scientific data are accurate?
4. How do we ensure that scientific investigations are both safe and consistent with standard scientific practice?
5. How do we know if the conclusions of a scientific investigation are valid?
6. An important step of the scientific method is to do background research. During this step, what should you research before you begin the experiment?
7. Philosopher Robert Pirsig said that the scientific method is good for testing the truth of what you think you know, but it can't tell you where you ought to go. What do you think Pirsig was trying to say? What can you do after testing a hypothesis? What happens if your hypothesis is wrong?

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