**Earth/Environmental Science**

**Unit: Introduction to Earth Science**

**Timeline**: August 25-29, 2014

**Test** **Date**: August 29, 2014

**Standards:**

**Learning Targets: \*Check off each learning target as you master it\***

* I can define Earth and Environmental Science in a practical sense.
* I can identify the branches of Earth Science.
* I can understand and explain laboratory safety rules.
* I can distinguish between hypothesis, theory, and law.
* I can analyze the scientific method.
* I can analyze, understand, and implement the use of scientific measurement techniques.

**Essential Vocabulary:**

* Earth Science
* Environmental Science
* Geology
* Meteorology
* Oceanography
* Astronomy
* Hydrosphere
* Lithosphere
* Biosphere
* Observation
* Hypothesis
* Theory
* Law
* Experiment
* Data
* Conclusion
* Variable
* Independent Variable
* Dependent Variable
* Control Variable

**Assignments**

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| --- | --- | --- |
| **Assignment Name** | **Due Date** | **Special Notes** |
| Bell Ringers (Unit 1) | 8/29 | \*\* Will be checked in class (5) |
| What is Earth Science WS | 8/25 |  |
| Parts of the Sci. Method WS | 8/26 |  |
| M&M Sci. Method Lab | 8/26 |  |
| HW- Sci. Method Article Questions | 8/27 |  |
| Density & Measurement Lab | 8/27 |  |
| HW – Independent Practice WS | 8/29 |  |
| Writing Prompts | 8/29 | \*\*Complete In Science Journal |

**Writing Prompts:**

1. Which branch(es) of Earth science is/are most relevant to human life? What sorts of discoveries might be made in this branch that could help sustain human life in the future?
2. Why is it important to study each branch of Earth science? What might be the repercussions of studying only a couple of branches?
3. Do the branches of Earth science overlap? Is it important for the branches to be independent of each other?
4. An important step of the scientific method is to do background research. During this step, what should you research before you begin the experiment?
5. 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?