Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 1: The Nature of Science**

* 1. ***A Brief History of Advances in Science***

***\* \_\_\_Rational Thinking\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is basic to science***

***Rational Thinking****: searching for\_\_\_\_\_\_****cause****\_\_\_\_\_\_\_\_\_ & \_\_\_\_****effect****\_\_\_\_\_\_\_\_ relationships*

**HISTORY**

**Where & When**

**Scientists**

**Greece**

**3rd and 4th centuries BC**

**“Modern Science”**

******

**Galileo**

**Einstein**

**Copernicus**

Italian Physicist

Used experiments, not speculation, to study nature’s behaviors

Stated “…it only takes one experiment, provided it is repeatable, to show that I am wrong.”

Polish Astronomer

***Idea***:

Sun is stationary, Earth revolves around the sun

* 1. ***Mathematics and Conceptual Physical Science***
* **Math is a \_\_\_\_\_\_tool\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of Science**

**Science Uses Math for**

****

 **calculations**

 **measurements**

* 1. ***Science Has Limitations***

**Science MUST BE:**

******

 **observable**

 **testable**

******

 **Subject to peer**

**review**

**Part of the**

**natural world**

 **repeatable**

**verifiable**

******

**Self-correcting**

******

**Math, Technology, Supernatural**

**Biology, Physics, Chemistry**

***Pseudoscience Reading***

**What are 3 things you learned or found to be interesting from the reading**

***A.***

***B.***

***C.***

**Name 2 types of Pseudosciences**

***1.*  Astrology**

***2.* Phrenology**

**Give 1 definition for what a pseudoscience is**

***My Definition:***

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

* 1. ***Technology – Practical Use of the Findings of Science***
* **Technology \_\_IS\_\_\_\_\_\_ \_\_\_\_\_NOT\_\_\_\_\_ Science**
* **Technology is an \_\_\_\_\_\_instrument\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ used to conduct investigations.**
	+ **Allows us to use our knowledge for practical purposes**

**Using the words in the box, write your own definition for “science”**

Self-correcting common sense nature technology organized

rational verifiable supernatural observation continuous

Repeatable natural world mathematics subject to peer review

**Your Definition:**

**Our “Simple” Definition: A body of knowledge about nature**