Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit/#:\_\_\_\_\_\_\_\_\_\_\_\_\_

What is Science Guide

What is the Purpose of Science?

* Science is about questioning.
  + Asking \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, searching for answers, \_\_\_\_\_\_\_\_\_\_\_\_\_ new questions
* Science is ONE of \_\_\_\_\_\_\_\_\_\_\_\_ of understanding the world we live in.
  + But it is \_\_\_\_\_\_\_\_\_\_\_\_ in what it can help us understand.

What are the Limits of Science?

* Science Cannot:
  + Answer questions about the \_\_\_\_\_\_\_\_\_\_\_\_\_ world.
  + Understand matters of faith, \_\_\_\_\_\_\_\_\_\_\_, and aesthetics (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_).
* Science Can:
  + Ask/Answer questions about the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ world.
  + Only understand observable/testable topics.
* What are the Limits of Science?
* Science Cannot:
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_ an idea.
  + Offer a concrete, 100%, no-doubt-about-it answer.
* Science Can:
  + Offer evidence that \_\_\_\_\_\_\_\_\_\_\_ or fails to \_\_\_\_\_\_\_\_\_\_\_\_ an idea.
  + Offer answers under specific criteria/limitations.

What are the Limits of Science?

* Science Cannot:
  + Assume outcomes without \_\_\_\_\_\_\_\_\_\_\_.
  + Disregard evidence that does not support a claim.
* Science Can:
  + Predict likely outcomes; offer explanations to make sense of collected \_\_\_\_\_\_\_\_\_\_\_\_

How does Science Behave?

* Scientific knowledge \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (changes)!
  + SCIENCE IS NOT a rigid set of \_\_\_\_\_\_\_\_\_\_\_ to be memorized.
  + SCIENCE IS an ever-changing search for \_\_\_\_\_\_\_\_\_\_\_\_ about the natural world.
  + Scientific knowledge results from ceaseless study, debate, and testing of ideas.
    - As a result, scientific knowledge is always \_\_\_\_\_\_\_\_\_\_\_\_!

So…What *IS* Science?

* Science is a limited discipline that studies \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ events, while offering natural explanations for the phenomenon under study.
* The criteria of science: Consistent, Predictable , \_\_\_\_\_\_\_\_\_\_\_, Testable, Natural, \_\_\_\_\_\_\_\_\_\_

What’s “Outside of Science”?

* **Non-Science**: Non-science may be defined as an area of knowledge which does not meet the criteria of science. Non-science topic areas may be very \_\_\_\_\_\_\_\_\_\_ and based on good reasoning, but simply do not fall within the realm of science.
* They would include any belief system, e.g., \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, philosophy, personal opinions or attitudes, a sense of aesthetics, or ethics.
* **Pseudoscience**: Pseudoscience may be defined as a non-science which is portrayed and advertised as a science by its supporters.
  + A good example of a pseudoscience would be "astrology“. Astrology is the study of celestial bodies (Sun, moon, planets, stars) interpreted as affecting \_\_\_\_\_\_\_\_\_\_\_\_\_, human affairs, and natural events.