



This is a listing of traits of Science and of Fiction to be used in the introductory tally on the black/white board of traits. It is to be used again at the end in the Assessment, when students demonstrate learning by recreating these ideas as a requirement for obtaining their “Passport to Prometheus.”

Science Is:

- Based on observational and experimental evidence.
 - Structured by hypothesis, experimental methodology, review of data, interpretation of results, and conclusions.
 - Expressed in words, in images such as diagrams, schematic drawings and photographs, in statistical and mathematical relationships, and in data graphics.
 - Peer reviewed by other scientists who test the evidence.
 - Validated by others, who, using the same methods and materials, obtain the same results.
- A scientific proposition is also validated by its ability to predict an outcome, result, or value.
 - A rational, non-emotional system for knowing nature and phenomena.
 - Changing, and subject to continual review; always evolving as new evidence comes in.

Fiction Is:

- Based on imagined elements that compose a story—not on data gathered from nature.
- Structured by plot, characters, setting, and dialogue.
- Expressed in text, including metaphor and other narrative techniques.
- Not peer-reviewed. Anyone can write a story and offer it to others. If it sells, it is considered “valid.” This is not true of science. Science’s validity rests in its inherent power to explain and predict. Fiction has no such requirements—it can explain, entertain, celebrate, and denounce.
- Not validated by others.
- An emotional as well as logical/rational system for exploring human nature through story telling in an imaginative way.
- Is static. A story doesn’t necessarily change if someone else imagines a new element—a sequel is written. In science, new data tends to revise a hypothesis and earlier hypotheses are no longer “enjoyed” as Harry Potter I is, even with the arrival of Harry Potter VII. If Harry Potter were a science book, people would work off HP VII—and refer to HP I as an early, erroneous theory helpful to arriving at HP VII.

Both Are or Can Be:

- Imaginative
- Creative
- Analytical
- Dependent on discipline to produce
- Components of a civilized culture
- Used for good or ill—to hurt or harm (but people control literature and science and technology—not the other way around)
- Performed by all people, and participated in by all people in all cultures of the world—children and adults, men and women