

Writing Assignment: Disproved Scientific Theories

The Story: In class we learned about how Ptolemy (and many cultures all around the world) thought that the Earth was the center of the Universe, but this was eventually proven to be incorrect. The Geocentric Theory was thus replaced by the Heliocentric Theory, because people took observations, analyzed data, concluded that old theory must be wrong, and came up with a new theory. We have since proven the new theory to be correct.

The Assignment: There are many other scientific theories which have also been proven wrong over the years. Write a paper exploring a **different** scientific theory (not the Geocentric Theory) that was once believed to be true but now we know is wrong. The theory does not have to be about astronomy, it can be about any scientific topic. If you are having trouble finding a theory, try Googling “disproved scientific theories,” there are several lists online.

Include as much of the following as possible:

- What is the theory?
- Who came up with the theory and when?
- How long did people believe it?
- Why did people believe it? What is the evidence that the theory was true?
- Who proved the theory wrong and when?
- What is the new theory that replaced the old one?
- What scientific phenomena was the old theory unable to explain that the new theory could?
- Are we sure the new theory is correct now? How do we know?

The Details:

- Deadline: submit on Blackboard before class **Thursday Sept 22**.
- Length: 850 words (about 3 pages double spaced)
- Citations: give the URLs of any websites, or provide any other sources you use, at the end of the paper
- Grading: First draft will be 25% of the final grade. Final draft is 75%.

The Purpose of this Assignment: In this assignment you will demonstrate your understanding of the scientific method by describing how observing the world, taking data, and making logical conclusions helps us discover patterns, come up with theories, and learn about the universe.

Disproved Theories Writing Rubric

Evaluation Areas	Points	Description
Coherence		
Clarity, Coherence, and Flow	4	Does the writing make sense? Are the sentences easy to understand? Does the writer communicate well? Does the paper stay on topic, and not wander?
Paragraphs and Organization	4	Is there a introduction, body, and conclusion? Does the paper flow chronologically? Are there good transitions between paragraphs? Does each paragraph represent a main idea?
Content		
Requirements	4	Do you fulfill all of the assignment requirements?
Details and Description	4	Do you provide details and explain them clearly?
Plagiarism	3	Plagiarism less than 15% (as reported by TurnItIn)
Structure		
Length	3	Meet or exceed word count: 3 80%-99% of word count: 2 50%-79% of word count: 1 less than 50%: 0
Spelling/Grammar	1	Are there few spelling/grammar mistakes?
Citations	1	Are there URLs at the end of the paper? Are the citations relevant?
Total Points:	24	