

Theoretical Astronomy Debate Project

“Space.....the final frontier”. This is the opening quote to the Star Trek tv shows and movies. In many ways it is a fairly accurate statement as discoveries are made regularly on Earth, but usually more questions arise than are answered when studying space. Developing beliefs and theories is one goal of a scientist, but to get to another level of understanding of science involves questioning one’s own thoughts. In a debate of any topic, it is easy and simple to express an opinion, but further understanding involves seeing other perspectives, being open-minded, and the ability to support objections to your own views. For this project, you will take on the role as a debate mediator as you present information about a theoretical subject of astronomy and coordinate questions in a debate-style format that is not biased. The project is due in two weeks and the following criteria must be fulfilled :

1. Choose a theoretical question to research (*here are SOME ideas*) :

- Is time travel possible?
- Do wormholes exist, and possible?
- Can multiple universes or dimensions exist?
- Does intelligent life exist elsewhere in the universe?
- Is matter balanced by anti-matter (black hole vs. white hole)?
- Do black dwarf stars exist?
- Where does space start and stop?
- What will happen to the universe in the future (since it is expanding)?
- Is it possible to create light sabers?
- Is existence based solely on personal perspective?
- What is eternal life?
- How was everything created?
- What will happen when the proton radioactively breaks down?
- Is an after-life a real possibility or a human concept?
- Is terraforming of planets realistic?

2. Create a PowerPoint educating the class about your chosen question. Include the following :

1. Question Slide

- What is your astronomy question?
- (Include a picture and your name)

2. Background Information Slide

- List 5 bullet points informing the class about the topic in question.
- (Include at least one picture)

3. Supporting Remarks Slide

- Include 5 reasons that support the idea presented.
- (Include at least one picture)

3. Debunking Remarks Slide

- Include 5 reasons that debunk the idea presented.
- (Include at least one picture)

4. Video Element

- Include a link to 3-5 minute video pertaining to the subject.

5. Debate Question Slides

- Create five questions to be debated.
(Have a slide for each question)
(Create a debate format of your choice)

GRADING RUBRIC

EX = Exceeding

- All required content present
- All required visuals present
- Accurate information
- Video element impactful
- Firm understanding of subject
- Organized and thoughtful
- Unbiased presentation
- Open-minded to all ideas
- Maintains control of debate

MT = Meeting

- Missing 1-2 content elements
- All required visuals present
- Accurate information
- Video element impactful
- Firm understanding of subject
- Organized and thoughtful
- Unbiased presentation
- Open-minded to all ideas
- Maintains control of debate
- *Missing 1 Element from EX*

DV = Developing

- Missing 3-4 content elements
- Missing 1-2 visual elements
- Accurate information
- Video element present, not useful
- Superficial understanding
- Organized, but lacking depth
- One-sided presentation
- Supports one viewpoint
- Limited involvement

BG = Beginning

- Missing 5+ content elements
- Missing 2+ visual elements
- Information lacks credibility
- Video element missing
- Little understanding
- Disorganized
- Biased presentation
- Promotes one viewpoint
- Disorganized debate