

Annotated Bibliography: Space

Topic: Is exploring Mars worth the Investment?

Source 1

Thom, Patteron. "Mars Rover: Is All This Really Necessary? - CNN.com." CNN. Cable News Network, 7 Aug. 2012. Web. 14 May 2015.

This source primarily provides the reasons why exploring Mars both with and without the Curiosity rover would be beneficial to humankind. The most notable of which is that the rover mission would be a scouting mission for future human travel to the planet, just as the Sojourner mission was for human travel to the moon. Another reason is that traveling to Mars can tell us more about Earth's geology and climate so that we can solve our environmental problems. The Curiosity has also created 7,000 jobs over 31 states, and only takes up 14.7% of NASA's annual budget. The article also suggests that Mars could have viable energy resources that could be used on Earth. This article is useful because it provides claims in favor of the rover that are backed with factual evidence that includes: information about the Mars Rover, statements from scientists and white house officials, financial information. This source is credible, being that it is an internationally recognized and reliable news source.

Source 2

Brown, Eryn. "Is Exploring Mars worth the Investment?" Los Angeles Times. Los Angeles Times, 30 July 2012. Web. 19 May 2015.

This source takes a more philosophical and less bluntly scientific angle on the question, "Is Exploring Mars worth the Investment?". This article argues the benefits of Mars exploration such as what it means to find life on another planet as well as how space exploration acts a national status symbol. Mars exploration could answer questions about the history of the Earth, strengthen the prestige of the United States, as well as bolster youth interest in science. This article provides quotes from university professors that address how life on Mars affects humanity as well as quotes from NASA employees that address their fears of loss in their exploration programs. This source is a worthwhile one to read because it provides a plethora of quotes from distinguished scientific individuals that address the topic from the financial end to the philosophical end. This website's credibility is questionable due to its commerciality, however there is a majority of credible primary source content within the article.

Source 3

Lee, Rhodi. "Mars Rover Curiosity Is 'a Poor Science Return': NASA Panel." Tech Times RSS. TechTimes, 05 Sept. 2014. Web. 15 May 2015.

This source offers the proceedings of the Planetary Mission Senior Review panel's review of the efficiency of the Curiosity Rover's campaign. The article quotes that the panel is displeased at the fact that the rover is only taking two samples in eight years when it has the capability to detect carbon, do in situ age analysis, and measure ionizing particle flux. The panel also states that the rover's mission has "poor science return", which means that given the money and time put into the mission, the rover returns with limited scientific data. The review panel suggested that the Curiosity team fully utilize the rover's capabilities because it is such an important mission. This source is useful because it provides a reason against the investment in Mars exploration. This source is credible because the author sites its information from the University of Notre Dame's review panel professor's writing.

Source 4

Duke, Michael. "Mars Exploration Rationale." Mars Exploration Rationale. Calvin J. Hamilton, n.d. Web. 15 May 2015.

This source discusses simply why any country would travel to Mars given the benefits it provides. Dr. Duke provides "objectives" that could be complete if Mars is explored. He divides his argument into three categories: Science, Human Expansion, and International Cooperation. Under the science heading, he discusses the scientific questions that are at the core of the Mars scientific exploration as defined by the Reference Mission. Under "Human Expansion", Dr. Duke's claim is that with new lands comes new opportunities, the most prominent of which being humans living on Mars. He then further analyzes the problems that would arise in such a situation as well as the benefits. Under "International Cooperation", Dr. Duke's claim is that humans conquering Mars will bring unity among many countries. He supports this claim by referencing the separation that the Cold War space race caused in the world as well as the "Reference Mission Report", which states that the mission will be undertaken by a "multinational group of nations and explorers". This source is a worthwhile one to read because it is written by a doctor and employee of the NASA Johnson Space Flight Center, and provides supported reasons for why Mars exploration is a good investment. However, the credibility of the website is question because it is a ".com". The website's merit is increased by the fact that its publisher is an electrical engineer that worked for NASA.