Nature of Science and Math:Analyzing the Presence in Everyday Communication

Star Treff

Endeavor STEM Teaching Certificate Project

Nature of Science and Math:Analyzing the Presence in Everyday Communication

The Nature of Science and Math surrounds our everyday life and shapes the world we live in. In my classroom I often use a website called, Newsela.com. It has current event articles that the students find interesting and user friendly. For my analysis I will be review the article from the site entitled, Nasa sending a tiny robot helicopter to Mars, by Sarah Kaplan (2018). This article meets manny of the NGSS tenets along with Core Core Mathematics Practices.

NGSS connection

The three different tenets of NGSS standards that this article meets are Scientific Investigations use a Variety of Methods, Science is a way of knowing, and Science addresses questions about the natural and material world.

The article discusses how they have been sending different contraptions to Mars for 50 years and that the next project will be to send a tiny robotic helicopter in the year 2020 (Kaplan,2018). This shows that Science is ever changing and that there is always new knowledge to be gained in different forms. The articles also talks about how the rover will have a drill to collect rock samples to see if it is a habitable environment (Kaplan,2018). This investigation of the surface may be useful in the future if this planet becomes uninhabitable. This is an example of a way of us knowing weather we can live on other planets or if anything has ever lived there before. Finally, the article reveals that the helicopter will be powered by solar panels and that there is an internal heating system that will keep it warm at night (Kaplan,2018). This example shows that you need to factor in weather, the natural world, when you are dealing with the material world. The atmosphere of Mars is very different from Earth’s so this factors into the engineering of the copter.

Common Core Math Practices

The article also meet 3 Common Core Math Practices. The first practice is making sense of problems and persevere in solving them. The second practice is attend to precision. The third practice being use appropriate tools strategically.

Mimi Aung explains one of the problems that arose "To make it fly at that low atmospheric density, we had to scrutinize everything, make it as light as possible while being as strong and as powerful as it can possibly be. "She is the Mars Helicopter project manager at NASA's Jet Propulsion Laboratory (Kaplan,2018). Mimi knew that they would have to figure out this problem and preserve through to make her plan succeed. The practice of attending to precision was shown by the project taking 4 years of testing and redesign. Finally, they way they demonstrated using appropriate tools is by having the helicopter hitch a ride on the underbelly of the rover, as to not to have to make multiple trips. This was an example of using the resources strategically.

References

Kaplan,S.(2018,May 24) Nasa is sending a tiny robot helicopter to Mars. Washington Post Adapted by the Newsela staff. Retrieved from https://newsela.com/read/elem-tiny-robot-helicopter-mars/id/43671