## In in space exploration and advancement. it thought

Economics, Budget



In the recent article "Earthworms are thriving in Martian(ish) soil", by Ellen Airhart, it explains how earthworms were surviving and reproducing in a copy of Martian soil. Scientists don't have access to real Martian soil so, Wieger Wamelink purchased a "a simulation from NASA at a hefty \$2,500 for about 220 pounds.

"This dirt is from the bottom of a volcano in Hawaii and scientists sterilized it to copy the lifeless Martian soil/life. Wamelink was excited when he added adult earthworms; they not only survived but reproduced. Wamelink then planted many types of seeds that included tomato, wheat, cress, field mustard, and a wild plant called stonecrop which all grew.

A problem/danger is perchlorate, which is put in propellants and packaging that affects the thyroid and lungs. Martians will have to get rid of this substance before they plant anything, otherwise "soil samples may bring back news of other less-than-delicious substances." Scientists say that even though the soil on Earth isn't perfect, there are many factors and characteristics that help the soil, planet, and life thrive. They say that this will not be the case on Mars. Scientists, like Andrew Palmer, hope to have analytical analysis of Mars' soil/dirt.

He says that if he and his team can analyze the soil, he will be able to figure out if human life would survive and how much to budget for this exploration. "'We're getting better,' Palmer says. 'You start imperfect and you refine and refine and refine.'" I chose this article because I'm really interested in space exploration and advancement. I thought that it was cool that scientists are starting to mimic Mars' soil and trying to see if different life forms can

survive. This news article relates to science because it is about space and life forms.

This news could be beneficial to someone like a scientists or astronaunt because they now have an idea of what it will be like to live on Mars. The scientist would be able to bring new ideas to the table and the astronaut would be able to prepare in a certain way to survive life on Mars. This information is important to study and report this because the scientists at NASA have been trying to get humans to Mars for years and now that we know what it is kind of like on the planet, they can study and prepare for things differently.

The public could support this by helping fund different studies/experiments and getting the word out.