

Science Article

I chose the article, *Asteroids may have delivered water to early Earth*. The report was written for students to understand. The team presented more complex scientific research that was submitted to the science community.

Daly and his team wanted to investigate the possibility that asteroids could have brought some of the water to our planet. To investigate this question, they designed a study that showed that asteroids could hit Earth without losing all the water. In fact, his findings suggest that you would find water on the moon inside asteroids, which hit the moon's surface.

Tenet one: Knowledge is Open to Revision in Light of New Evidence

Water can be trapped in rocks even on a planet without an atmosphere. Before the experiment, the thought was that water would vaporize upon impact.

Tenet two: Science Addresses Questions about the Natural and Material.

How did the Earth get its water?

At impact, glass and rock trapped some water vapor.

Tenet Three: Scientific Knowledge is based on Empirical Evidence

Computer models calculated and projected data on the probability of mathematical calculations were used to determine the speed needed for the rock to simulate an asteroid required to fly to hold its water. This data was used in the experiment.

A computer program was used to generate results based on speed and impact. I used a link provided in the article; the author explains how math, data, and instructions are used in the research.

Tenets of Four: Science Models, Law, Mechanisms, and Theories Explain Natural Phenomena

Scientific theory: Big Bang Theory

Tenet five: Scientific Investigation Use a Variety of Methods

Daly and Schultz used both computer programs and experiments (shooting rocks out of a cannon) to collect data and learn new information.

Tenet Six: Science is a Human Endeavor—a source of inspiration

Daly has a Ph.D. in earth and planetary sciences. Daly collaborated with Peter Schultz. The study was presented with its findings on April 25 in *Science Advances*.

Creativity is found in people and their curiosity of knowing more. The creation of an artificial asteroid by using a volcanic rock is an example of creativity.

The tenets of science are intertwined in the articles. It may be hard to pull each tenet apart from the other tenets.

Link

<https://www.sciencenews.org/article/asteroids-could-have-delivered-water-early-earth>

Citation

Grossman, L. (2018, June 1). Asteroids may have delivered water to early Earth. Science News for Students. Retrieved June 1, 2018.