

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 changes as we know more.

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: Analyzing and interpreting data to construct an explanation

At impact, glass and rock trapped some water vapor.

Tenet Three: Empirical evidence gathered by observation or experiments

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: laws and theory

Scientific theory: Big Bang Theory

Tenet Five: objectivity and subjectivity

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*.

Tenet Six: The scientific method uses different approaches to gain knowledge.

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

Tenet Seven: Creativity—a source of inspiration

The creation of an artificial asteroid by using a volcanic rock.

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.