

Antonio Huizar

Junior Division Earth & Space Sciences

Craters And Meteors: How A Meteor's Weight Affects A Crater's Size

This project's purpose is to determine how a meteor's weight affects a crater's size. This way if a minor meteor were to hit Earth, scientists would be able to determine the size of the impact and possibly evacuate the area in which the meteor is expected to hit. Later on, during the experiment, I discovered that, to determine the size of a crater you will need more than weight to do this. In order to simulate the impact of the meteor, several spherical objects were dropped into a surface of flour. The depth and diameter of the crater was measured and then recorded. The objects with more density made a deeper impression, but some of these dense objects were smaller than other bigger weightless objects. This experiment's conclusion is that more properties need to be considered when trying to determine size. Also, density plays a big part. As a conclusion, my hypothesis was proven to be partly wrong.