

THE BARRINGER METEORITE CRATER

www.barringercrater.com

Teacher Lesson 1: From Above or Below? Volcanic vs. Impact Craters

Overview

The debate over the origin of the Barringer Meteor Crater focused on two possible causes: volcanism or an impact. How do planetary scientists studying craters on other planets differentiate between a volcanic or impact crater?

PURPOSE

- To explain how volcanic and impact craters are different.
- To understand what clues scientists use to identify the origin of craters when they are studying planets.
- To understand why planets and moons have more craters than Earth

COMPLETION TIME

1 class period/hour

LEARNING OUTCOMES

- Students will be able to communicate the difference between volcanic and impact craters by identifying features of each.
- Students will use real images of craters from Google Mars and Google Moon to identify volcanic and impact craters
- Students will gain knowledge about how scientists use evidence to answer questions.
- Students will learn how impacts alter Earth.

TOOLS/MATERIALS

- Computer online access
- Student Data sheet "From Above or Below?"

Procedure

BEFORE THE ACTIVITY

- Copy the Student Data sheet "From Above or Below?"