
My NASA Data - Interactive Models

Volcanic Eruptions Story Map



A volcano is an opening on the surface of Earth that allows material warmer than its surroundings to escape from its interior. When this material escapes, it causes an eruption. An eruption can be explosive, sending material high into the sky, or it can be calmer, with gentle flows of material. Volcanoes can be active, dormant, or extinct. Active volcanoes are volcanoes that have had recent eruptions or are expected to have eruptions in the near future. Dormant volcanoes no longer produce eruptions, but might again sometime in the future. Extinct volcanoes will likely never erupt again. Volcanoes occur when material significantly warmer than its surroundings is erupted onto the surface of a planet or moon from its interior. On Earth, the erupted material can be liquid rock ("lava" when it's on the surface, "magma" when it's underground), ash, cinders, and/or gas.

To learn more, visit:

- The [Volcanic Eruptions Phenomena page](#) for background information



Virtual Teachers: Make a copy of the Google Form of your choice so that you may assign it directly from your Google Drive into your Learning Management System (e.g., Google Classroom, Canvas, Schoology, etc.). Do you need help incorporating these Google Forms into your Learning



Management System? If so, read this [Guide to Using Google Forms with My NASA Data](#).

Teachers who are interested in receiving the answer key, please complete the [Teacher Key Request and Verification Form](#). We verify that requestors are teachers prior to sending access to the answer keys as we've had many students try to pass as teachers to gain access.

Grade Band

- 6-8
- 9-12

Supported NGSS Performance Expectations

- [MS-ESS2-1: Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.](#)
- [MS-ESS3-2: Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.](#)
- [HS-ESS2-2: Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.](#)

NGSS Disciplinary Core Ideas

- ESS2A: Earth Materials and Systems
- ESS3B: Natural Hazards

Science and Engineering Practices

- Developing and Using Models

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- Analyzing and Interpreting Data

Crosscutting Concepts

- Patterns
- Systems and System Models
- Stability and Change

Related Resources

- [Volcanic Eruptions Story Map](#)
- [Instructional Strategies for the Earth Science Classroom](#)
- [Data Literacy Cube Guide](#)