My NASA Data - Mini Lesson/Activity Introduction to Volcanic Ash

Grade Band

- 6-8
- 9-12

Time

• 15 minutes

Overview

Watch NASA videos about aerosols and volcanic ash.

Student Directions

Steps

Video: NASA's Earth Minute: My Name is Aerosol

NASA's Earth Minute: My Name is Aerosol | https://www.youtube.com/watch?v=4eh6lKahbok | Source: NASA Climate Change

- 1. Watch the videos and answer the questions. Check with your instructor on how to submit answers.
- 2. Watch the NASA's Earth Minute: All About Aerosols video (above).
 - 1. Identify different sources of aerosols.
 - 2. What are the effects of aerosols?
 - 3. How does NASA study aerosols?
- 3. Watch the <u>NASA video</u>: *Fire, Ice, and Safer Skies*: *NASA Satellites Track Volcanic Clouds* (below) which describes hazards of volcanic emissions.
 - 1. How does volcanic ash demonstrate an interaction between the geosphere and the atmosphere?
 - 2. Why are volcanic emissions a problem?
 - 3. What is NASA tracking to try to help predict emissions?

Video: Fire, Ice,	and Safer	[·] Skies: NAS <i>A</i>	Satellites	Track V	/olcanic	Clouds
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Fire, Ice, and Safer Skies: NASA Satellites Track Volcanic Clouds | https://www.youtube.com/watch?v=TP4vzFojewU&t=3s | Source: NASA

Teacher Note

Teachers, these mini lessons/student activities are perfect "warm up" tasks that can be used as a hook, bell ringer, exit slip, etc. They take less than a class period to complete. Learn more on the "My NASA Data What are Mini Lessons?" page.

Teachers who are interested in receiving the answer key, please complete the <u>Teacher Key Request</u> and <u>Verification Form</u>. 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.

Sources:

- 1. NASA's Earth Minute: My Name is Aerosol. (2017, January 13). YouTube. Retrieved April 28, 2022, from https://www.youtube.com/watch?v=4eh6lKahbok
- 2. Fire, Ice, and Safer Skies: NASA Satellites Track Volcanic Clouds. (2016, May 10). YouTube. Retrieved April 28, 2022, from https://www.youtube.com/watch?v=TP4vzFojewU

NGSS Three Dimensional Learning

NGSS Disciplinary Core Ideas

ESS2A: Earth Materials and Systems

Crosscutting Concepts

Cause and Effect

Science and Engineering Practices

• Obtaining, Evaluating and Communicating Information