My NASA Data - Interactive Models

Air Quality StoryMap

Grade Band

- 6-8
- 9-12

Time

- > 90 minutes

Directions

Visit the StoryMap to access the 5 E Lesson.

Teacher Note

Air pollution comes from many different sources: stationary sources such as factories, power plants, and smelters; mobile sources such as cars, buses, planes, trucks, and trains; and naturally occurring sources such as windblown dust, and volcanic eruptions, all contribute to air pollution. Air Quality can be affected in many ways by the pollution emitted from these sources. These pollution sources can also emit a wide variety of pollutants.

To learn more, visit:

- The My NASA Data Air Quality Phenomena page for background information

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.

NGSS Three Dimensional Learning

NGSS Disciplinary Core Ideas

- ESS2A: Earth Materials and Systems
- ESS3A: Natural Resources

- ESS3C: Human Impacts on Earth Systems

Crosscutting Concepts

- Systems and System Models
- Stability and Change

Science and Engineering Practices

- Developing and Using Models
- Analyzing and Interpreting Data

Learning Objectives

- Students will identify ways in which Earth System interactions drive changes in air quality.
- Students will use evidence to describe the major long-term trends in Air Quality in the United States.
- Students will observe the effects of air quality in the Earth System.
- Students will make a prediction about the source of air pollution.

Essential Questions

1. What are the standards for monitoring air quality and why are these standards important?
2. What is air pollution and how does it impact a community?
3. What forces drive the transport of air pollution?

Document Resources

- Student Sheet (All E's)

Google Docs Interactive Files

Student Sheet (All E's)