



In The News

Current Events in Earth & Space Science

Summaries for the Classroom

5.8 Virginia Earthquake

August 23, 2011. Residents from Georgia to Canada felt the ground shake from an earthquake that occurred not on the west coast, but in the center of the North American tectonic plate. It had been 70 years since the east coast felt an earthquake like the 5.8 that originated in Mineral, Virginia.

Articles to Share with Students

Rare Earthquake Hits Virginia, Rattles U.S. East Coast

<http://news.nationalgeographic.com/news/2011/08/110824-earthquakes-today-washington-dc-richmond-virginia-science/>

NPR Story: Is East Coast Prepared for Truly Powerful Quake?

<http://www.npr.org/templates/story/story.php?storyId=139885897>

IRIS Recent Earthquake Teachable Moment (including MS PowerPoint presentation)

<http://www.iris.edu/hq/retm>

NPR AUDIO: Earthquake Shakes East Coast

<http://www.npr.org/2011/08/23/139889650/earthquake-shakes-east-coast>

General Information

USGS Groundwater-Level Response to Virginia 2011 Earthquake

<http://water.usgs.gov/ogw/eq/VAquake2011.html>

Earthquakes – New York Times Science Topics

<http://topics.nytimes.com/top/news/science/topics/earthquakes/index.html>

USGS Did You Feel It? Community Internet Intensity Map

<http://earthquake.usgs.gov/earthquakes/dyfi/events/se/082311a/us/index.html>

Scientific American – An Essential Guide to the U.S. East Coast Earthquake

<http://www.scientificamerican.com/report.cfm?id=east-coast-earthquake>

Questions for Classroom Discussion

- What is an earthquake? Explain the difference between the magnitude (Richter Scale) and intensity (Modified Mercalli Intensity Scale) of an earthquake. Where are earthquakes most common?
- Describe the difference between the magnitude (Richter Scale) and intensity (Modified Mercalli Intensity Scale) of an earthquake. Why are both of these scales important for learning about an earthquake event?
- How do scientists study earthquakes? Who else is involved in studying and reporting on earthquakes besides scientists?
- Where was the most recent earthquake in the United States? In the world? Which recent earthquake was the closest to you? (*use the website <http://earthquake.usgs.gov/> to answer this question)
- Could an earthquake occur in Pennsylvania. Explain why/why not.
- Why do you think earthquakes are so difficult to predict?
- Should people be able to live in an area where earthquakes occur? Why/why not?

Tags

Earthquake, natural disaster, Virginia

Big Ideas

From the Earth Science Literacy Principles

- Big Idea 1. Earth scientists use repeatable observations and testable ideas to understand and explain our planet. (1.2, 1.3, 1.4)
- Big Idea 3. Earth is a complex system of interacting rock, water, air, and life. (3.6, 3.7)
- Big Idea 4. Earth is continuously changing. (4.5)
- Big Idea 8. Natural hazards pose risks to humans. (8.1, 8.4, 8.6, 8.7, 8.8)

From The Big Ideas in Earth and Space Science (ESBD)

- The Geosphere (5)
- The Nature of Science (21, 22, 24)