

Case Details

Case Title:

Georgia on the move

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Grade Level(s):

High School

Subject(s):

Earth Science

Summary:

Earthquakes in Georgia, no way! CNN.Com reports on the event that shook many Georgians into disbelief. As a result of an entire regions lack of preparedness a concerned group of young scientists have decided to investigate, design, and distribute publications on the hazards of plate tectonic movements.

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http://www.cse.emory.edu/cases/casedisplay.cfm?case_id=4406

Learning Objectives:

1. Interpret diagrams of plate tectonic settings produced by plates diverging, converging, and sliding past each other.
2. Explain how the Richter scale is used to convey the magnitude of seismic activity.
3. Categorize data and images associated with the damaging effects of earthquakes (magnitude).
4. Describe hazards associated with specific plate tectonic settings.
5. Relate local geologic features to specific plate tectonic settings.
6. Explain how specific plate tectonic settings formed local igneous and metamorphic rock and mineral resources.
7. Associate seismic wave activity to the magnitude of a seismic event.

National/State Standards:

Georgia Performance Standards

SCSh1. Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

SCSh3. Students will identify and investigate problems scientifically.

SCSh4. Students use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

SCSh5. Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

SCSh6. Students will communicate scientific investigations and information clearly.

SES2. Students will understand how plate tectonics create certain geologic features, materials, and hazards.