

Georgia on the Move: Scene 1

Scene opens on the news anchor desk of CNN.

Female News Anchor #1-Betty Bigsmiles: Reporting live from CNN in Atlanta, Georgia, I am Betty Bigsmiles. This just in: Small Earthquake Shakes the South.

A rare earthquake measuring magnitude 4.9 shook the South early this morning, Tuesday April 29, 2003, waking up people from Mississippi to North Carolina. Fortunately, the tremor failed to inflict significant damage, bleary-eyed residents and officials said. Tell us more about the dramatic incident, Sean.

Male News Anchor #2- Sean Slickhair: Thank you, Betty. I am Sean Slickhair. The epicenter of the tremor was about 37 miles southwest of Chattanooga, Tennessee, along the border of Georgia and Alabama, according to the U.S. Geological Survey web site. It struck just before 5 a.m. EDT.

Southeastern Kentucky, northeastern Mississippi and the western parts of North and South Carolina also felt the tremor, according to the National Earthquake Information Center in Golden, Colorado. Six minor aftershocks also were reported in the 2.0 to 2.5 ranges, according to the U.S. Geological Survey. For more details about the experience, lets turn to Wanda Promotion live on the scene.

Wanda Promotion: Thank you Sean. I'm here with Butch Kinemey, a spokesman for the U.S. Geological Survey (holds microphone to his face). Butch, should we be afraid that more earthquakes are on their way?

Butch: "This is not a seismically active area. It's unusual for the region to be shaken that way."

Wanda Promotion: Butch, what can you tell us about people's experiences of this earthquake?

Butch: "We've had hundreds of calls of people saying the tremors knocked pictures off walls, and a couple said their windows were cracked."

Wanda Promotion: Thanks Bruce. Betty and Sean, police in metro Atlanta said they got several calls from concerned residents. Susan Martin of the Atlanta suburb, Marietta was one of those who were shocked by the experience. Susan, tell us what the earthquake was like for you.

Susan Martin My body is shaking because it was so frightening. The shaking of my bed and the shaking of my house woke me out of a dead sleep. I felt two series of rumbles.

First I thought it was thunder. I live in a sturdy brick house, but it was shaking for 10 or 15 seconds. I was quick to get up and see if it was a tornado... I went to the window, but heard no wind and no rain. I called 911 and they asked me, 'Are you calling about the earthquake?'

Wanda Promotion: Susan was only one of many people who called 911 because of the shaking ground and resulting power outages. Back to Betty and Sean in the studio to learn more about the effects of these dramatic earthquakes!

Cooperative Group Responsibility Log

Title of Project:

Team # _____ Block: _____

Description of assignment:

Group Member	Task	Completed (yes/no)

Movers & Shakers

Construct a graphic organizer/picture that explains each type of boundary plate movement, including converging, diverging, and sliding past each other. For each type of movement, you should:

- Draw each process and label the earth's layers involved
- Explain each process
- Describe the new land formation
- Explain where in the world each process is happening

Graphic Organizer Grading Rubric:

Category	4 points-Excellent	3 points-Good	2 points-Fair	1 point-Poor	Total
Content – Draw the Process and Label the Earth's Layers	5 structures are drawn accurately and are recognizable. All assigned structures are labeled accurately.	4 structures are drawn accurately and are recognizable. All assigned structures are labeled accurately.	4 structures are drawn accurately and are recognizable. All assigned structures are labeled accurately.	1-2 of the assigned structures are drawn AND/OR labeled accurately. <i>(No points if no drawings are provided).</i>	
Content – Explanation of Process	Explanation of each process clearly stated with at least 3 supporting details about each.	Explanation of each process clearly stated with at least 1-2 supporting details about each.	Explanation of each process clearly stated with no supporting details about each.	One or more topics were not addressed.	
Content – New Land Formation	Accurately identified new land formations for all 5 processes.	Accurately identified new land formations for 3-4 processes.	Accurately identified new land formations for 1-2 processes.	Identification of land formation has not been attempted.	
Graphic Organizer	Graphic organizer has been completed and shows clear, logical relationships between all topics and subtopics.	Graphic organizer has been completed and shows clear, logical relationships between most topics and subtopics.	Graphic organizer or outline has been started and includes some topics and subtopics.	Graphic organizer or outline has not been attempted.	
Relevant Vocabulary	25 related and significant terms are included in the concept map	20 related and significant terms are included in the concept map	15 related and significant terms are selected and included in the concept map	15 terms are selected and included in the concept map	
Neatness and organization	Concept map is tidy, main concept is easily identifiable, entire map is well organized and legible	Concept map is tidy, main concept is identifiable, the map is mostly well organized and legible	Concept map is somewhat tidy, main concept is included, map is somewhat organized and legible	Concept map is not tidy, main concept is difficult to identify, map is not organized or legible	
Teacher Comments:					___/24

Georgia Performance Standard(s):

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

a. Distinguish among types of plate tectonic settings produced by plates diverging, converging, and sliding past each other.

b. Relate modern and ancient geologic features to each kind of plate tectonic setting.

Georgia on the Move: Scene 2

Continued—at the news anchor desk of CNN...

Betty Bigsmiles: This is Betty Bigsmiles...

Sean Slickhair: (he interrupts) ...and Sean Slickhair...

Betty Bigsmiles: ...at CNN studios in Atlanta, reporting on the earthquake that shook the south this morning. With us is Beverly Daniel, acting director of Cherokee County, Alabama's Emergency Management Agency. Beverly, welcome to CNN, and please tell us how Cherokee County was affected by the earthquake?

Beverly Daniels: Thanks Betty. In the aftermath of the earthquake, power outages were reported and a few trees down. It felt like an explosion, and we've got aftershocks,

Sean Slickhair: No injuries were reported, but police said there also have been power outages around Sand Rock, Alabama, and Lookout Mountain, which span Alabama, Tennessee and Georgia.

Beverly Daniels: Yes, Sean, and a few trailers shook off of their foundations... but there are no reports of major damage or injuries.

Betty Bigsmiles: Also with us is Georgia Tech professor Tim Long, who works in the school's earthquake monitoring lab. Tim, thank you for being with us today, and what can you tell us about the unusual nature of this earthquake?

Tim Long: Thank you Betty, it is a pleasure to be here. There appear to be two minor faults in northwest Georgia, the Cartersville and Rome faults; one that runs more or less along the Chattahoochee River; and two more in Central Georgia.

A small earthquake like this is not terribly unusual. The southeast Tennessee seismic zone, which actually extends from that area up toward Knoxville, is probably the second most active area in the Eastern United States.

Sean Slickhair: But isn't it odd to be having earthquakes in the south, Tim?

Tim Long: Actually, we have events like this about every 10 to 20 years. So far they have not been serious. There's potential for a larger event. In California, you get something like this once every month. In the East, it's relatively uncommon but not unheard of.

Betty Bigsmiles: Thank you both very much, Tim and Beverly, for being with us today at CNN. Next up on the morning news: Breathing Air. Is it safe for you or not? CNN reports!

Shake... Rattle... and Roll...

Each group will create an informative publication of their choosing (tri-fold brochure, debate, comic strip, flyer, newsletter, recorded Public Service Announcements with a written script ,etc...) that educates the public on the hazards associated with major seismic events. Information in the publication should relate certain geologic hazards to specific plate tectonic settings. The publication should also address what people should do if such an event happens.

Georgia on the Move Grading Rubric

CATEGORY	4 points- Excellent	3points - Good	2 points- Fair	1 point - Poor	Total Points
Content	All topics are addressed and accurate. All questions answered with at least 2 sentences about each.	99-90% of the topics are addressed and accurate. Most topics have at least 2 sentences about each.	89-80% topics are addressed, and accurate. Most topics have 1 sentence about each.	Fewer than 80% of the topics were not addressed.	
Graphics - Relevance	All graphics are related to the topic and make it easier to understand.	All graphics are related to the topic and most make it easier to understand	All graphics relate to the topic.	Graphics do not relate to the topic.	
Attractiveness	The publication is exceptionally attractive in terms of design, layout, and neatness.	The publication is attractive in terms of design, layout and neatness.	The publication is acceptably attractive though it may be a bit messy.	The publication is distractingly messy or very poorly designed. It is not attractive.	
Individual Student Notes	Notes are recorded and organized in an extremely neat and orderly fashion.	Notes are recorded legibly and are somewhat organized.	Notes are recorded.	Notes are recorded only with peer/teacher assistance and reminders.	
Sources	All sources (information and graphics) are accurately documented in the desired format.	All sources (information and graphics) are accurately documented, but a few are not in the desired format.	All sources (information and graphics) are accurately documented, but many are not in the desired format.	Some sources are not accurately documented.	
Teacher Comments:					_____/20

Self-Evaluation Worksheet

Date: _____ Your Name: _____ Group #: _____

Instructions: Please circle the response with which you agree the most. This evaluation will only be read by your teacher and will **not** be shown to other students.

How would you rate *your* participation in group discussion and group work?

5 Excellent **4 Very Good** **3 Good** **2 Fair** **1 Poor**

How would you rate *your* effort in completing the case?

5 Excellent **4 Very Good** **3 Good** **2 Fair** **1 Poor**

Did *you* complete the assigned homework? **Yes** **No**

If No, explain why:

How well did *you* work with everyone in your group?

5 Excellent **4 Very Good** **3 Good** **2 Fair** **1 Poor**

Overall, how would you rate *your* performance in this case?

5 Excellent **4 Very Good** **3 Good** **2 Fair** **1 Poor**

What praise or criticism do you have for other group members? What are your thoughts about the case?

Each group has 5 points per person to distribute to each member according to how well they participated in and contributed to their group (for example, a group with 5 students will have 25 points, a group with 4 students will have 20 points). Decide how the points should be shared within the group.

Student name: _____ Their points: _____

Student name: _____ Their points: _____

Student name: _____ Their points: _____

Student name: _____ Their points: _____

Student name: _____ Their points: _____