<u>Shake, Rattle, and Roll</u>

October 17, 2006

Dear Bethune Geological Research Team:

There have been 14 major worldwide earthquakes to occur in 2006. The most severe occurred in Java, Indonesia on May 26, 2006. It registered at a magnitude of 7.7 on the Richter scale and 5749 people were killed. We are very concerned by this increase in worldwide earthquake activity and activity in the United States. There is a high possibility that a major earthquake could occur in the Atlanta/Northwest Georgia area. Northwest Georgia is part of the Tennessee Seismic Zone, which has showed increased activity in the past 6 months.

You have been identified as the world's best geological research team.   We are counting on you to research earthquakes and their causes so that we may take preventative measures in the case of a major disaster.   Our number one concern is to protect our children. Upon completion of your research, your team is responsible for designing an earthquake proof school along with an evacuation plan. I look forward to working with you on this urgent matter.

Thank you for your help,

Dr. P. Patrick Leahy
USGS Director

Shake, Rattle, and Roll
Elizabeth Sheehan & Antione L. Ford

Instructions: Please fill this out and turn in ***one per group***. Some suggested Facts and Learning Issues are included but feel free to add your own. If additional room is needed, use the back of this sheet.

Facts	Hypotheses
14 major earthquakes worldwide - Earthquake occurred recently in Indonesia that killed a large number of people - Increase in earthquakes - Georgia is a part of the Tennessee Seismic Zone, which is showing increased activity	
Learning Issues	**Questions**
- What is an earthquake? - What is the Richter Scale? - Where is the Tennessee Seismic Zone? - What does increased activity in a seismic zone indicate? - What causes earthquakes? - What building materials can be used to construct an earthquake proof building? - What is an evacuation plan? And How do you create one? - What is the USGS?	

Group Members: _____

CATEGORY	4	3	2	1
Boxchart	All sections filled out completely.	3 sections filled out	2 sections filled out	1 section filled out
Building Plan	Model/Drawing of school is complete and all information is included on the type of materials used and the structure of the building.	Model/Drawing of school is complete and some information is included on the type of materials used and the structure of the building.	Model/Drawing is incomplete and minimal information is included on the type of materials used and structure of the building	Model or drawing is not turned in.
Evacuation Plan	Well prepared pamphlet with safety information and complete evacuation protocol included.	Well presented pamphlet but missing some information.	Pamphlet is incomplete	Pamphlet is not turned in.
Individual Participation	Homework completed, made contributions to group work, worked well with other group members.	Completed some homework and made contributions to group but was not always on task.	Completed minimal homework and made minimal contributions to the group.	Did not complete homework or contribute to the group.

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.*

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

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

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

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

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

    If No, explain why:

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

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

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

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

6. What praise or criticism do you have for other group members? What are your

thoughts about the case?

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