1. Last week's lecture
Draw diagrams of EITHER the three major fault types OR the three major plate tectonic boundaries. For each, indicate the direction of motion and give an example (a location where such a feature can be found).

2. Reading
Describe two specific and different mitigation strategies used during the Heimaey eruption described by McPhee in The Control of Nature. Explain how each works and the damage each strategy prevented.

3. Web
Give ONE piece of evidence that led people to believe that an eruption was imminent at Mt. St. Helens in early 1980.

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1. Reading - The Andrea Gail and its crew were victims of decisions that contributed to the ship's demise. Describe one fatal decision made just before the storm hit, one made weeks before the storm, and another made years before the storm. Consider how these decisions put the crew at risk.

2. Web- Who are Andrew and Mitch and what characteristic distinguishes each of them?

3. Lecture- What specific geologic event killed the Crafts and left only one person alive in St. Pierre? What type of volcano spawns this killer? At what tectonic margin would you find such a volcano?

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1. CLASS -- WHICH SIDE OF A NORTHERN HEMISPHERE HURRICANE IS MOST DAMAGING? WHY IS THIS? DRAW A DIAGRAM TO SUPPORT YOUR EXPLANATION THAT SHOWS WIND SPEED AND STORM SURGE.

2. WEB --LIST 2 SPECIFIC CHARACTERISTICS THAT MADE THE ASH WEDNSDAY STORM SO DAMAGING. WHY DID THE STORM BEHAVE THIS WAY?

3. READING --LIST THREE DIFFERENCES BETWEEN NOR' EASTERS AND HURRICANES POINTED OUT IN THE READING.

Reading   What happened on Casita Volcano in 1998 that changed Honduras
    forever? What triggered this event? Where on the landscape do most people
    in Honduras live and work that makes them so vulnerable to such a disaster?

Web   Where did the two floods occur that you read about? For each, list a human
    action prior to the floods that made the disasters worse.

Class   Draw and label a diagram showing the three weather systems that came
together to <u>create</u> the Perfect Storm. Describe (in 1 sentence per system) how each
contributed to this horror.

Reading   Give a short, simple definition for a mass movement. List two types of
    mass movements. Describe one way that people can trigger a mass movement.

Web You read about two or three different sets of landslides. Make a table
    indicating where two slides or sets of slides occurred and what event triggered
    each of the slides.

Class   Define the 100 year flood. List two mitigation strategies to protect against
such a flood.

Reading   What specific geologic phenomenon is the focus of McPhee's essay? List
    the specific sequence of events (in order) that causes this phenomenon.
    Describe the most important mitigation strategy employed by "THE ☐FLOO☐D"
    against this phenomenon.

Web What is a lahar? Where in general do lahars occur. Give an example of a
    lahar that you read about on the web.

Class   List the two most important factors contributing to landslides. Describe two
mitigation strategies, one for each factor.

Reading -- List the three phases of a Tsunami in the order in which they occur.
    Identify which phase causes the most damage and explain why. Give a short
    summary of the damage caused by one Tsunami cited in the article.

Web -- How did the 1960 Chile earthquake affect Hawaii? What happened in New
    Guinea in 1998? Give two reasons why so many people died in New Guinea?

Class -- Diagram, label, and describe the three phases of a debris or mud flow. Why were residents of coastal Venezuela so vulnerable to mud flow damage? Why did so many die in Armero from the lahar?

Reading -- What is a slab avalanche? How does it differ from a loose snow avalanche? On what angle of slope do avalanches most often occur?

Web -- LIST the two most important causes for the European avalanches that you read about? After the avalanches started, what PRIMARY mitigation strategy was employed?

Class -- What did 2 Japanese towns build as a Tsunami mitigation measure? List the four ways a Tsunami could be generated.

Reading --   LIST the two 2 different approaches, that the book's author uses in Chapter 13 and 14 respectively, to convince you that people die from bolides. LIST 2 of the 3 REASONS WHY the hazard from bolides has increased in the past century or two.

Web -- What size impactor is necessary to completely destroy civilization as we know it? What is Chicxulub?

Class -- WHERE in the mountains are avalanches most likely to happen (list 3 places). WHEN are are avalanches most likely to happen (list 3 times).

Reading -- What do the authors of this reading suggest is the MOST important need in global change research?

Web -- LIST three hazards posed by global climate change.

Class -- Briefly DESCRIBE what happened in Tunguska?   LIST TWO ways in which the Tunguska event was recorded -- one by nature and one by humans.

Reading -- What was Radiothor and how did it change the way we consider radioactivity?

Web --What happened at Chernobyl in 1986?

Class -- How do we know that levels of CO_2 in the atmosphere have changed over the past 100,000 years unrelated to human activity?