

Catastrophic Events

Name:

Teacher:

Class:

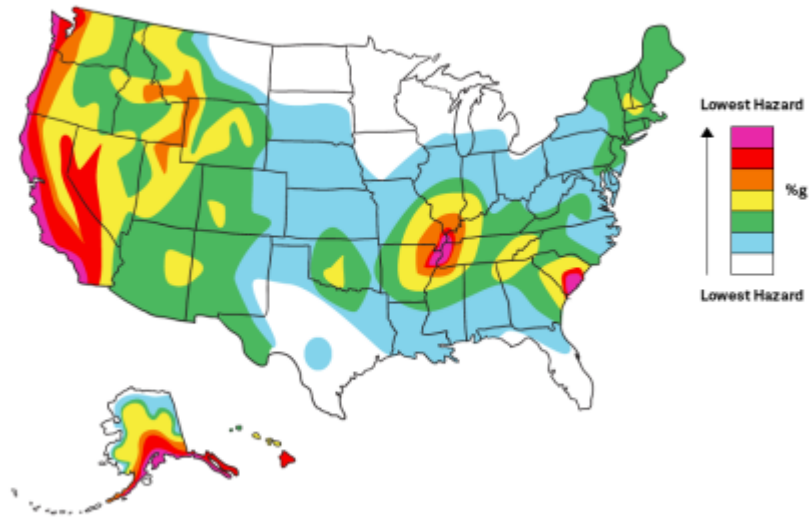
Earth and Space Science
Unit 2
Exit Tickets

Lesson 1 Exit Ticket: What Are Natural Disasters?

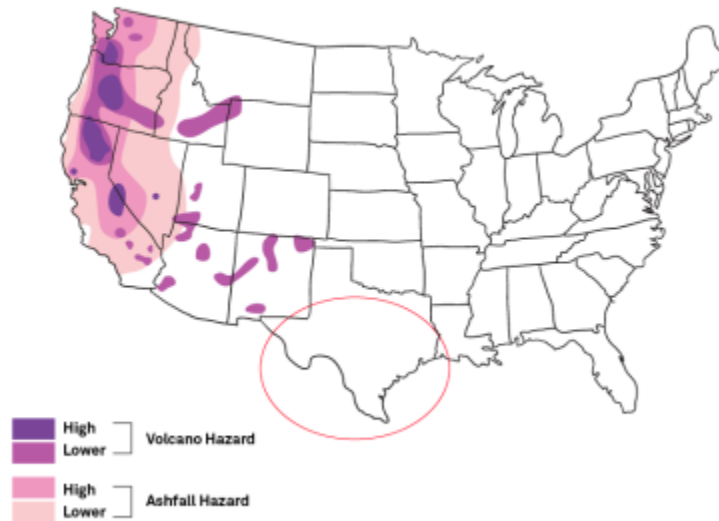
1. Identify a natural disaster we learned about today and explain why it's important for scientists to study natural disasters. [3]

Lesson 2 Exit Ticket: Mapping Natural Disasters

Directions: Use the reference maps to help you answer the question. You may also reference a map of the United States.



Volcanic Hazards
(Based on activity in the last 15,000 years)

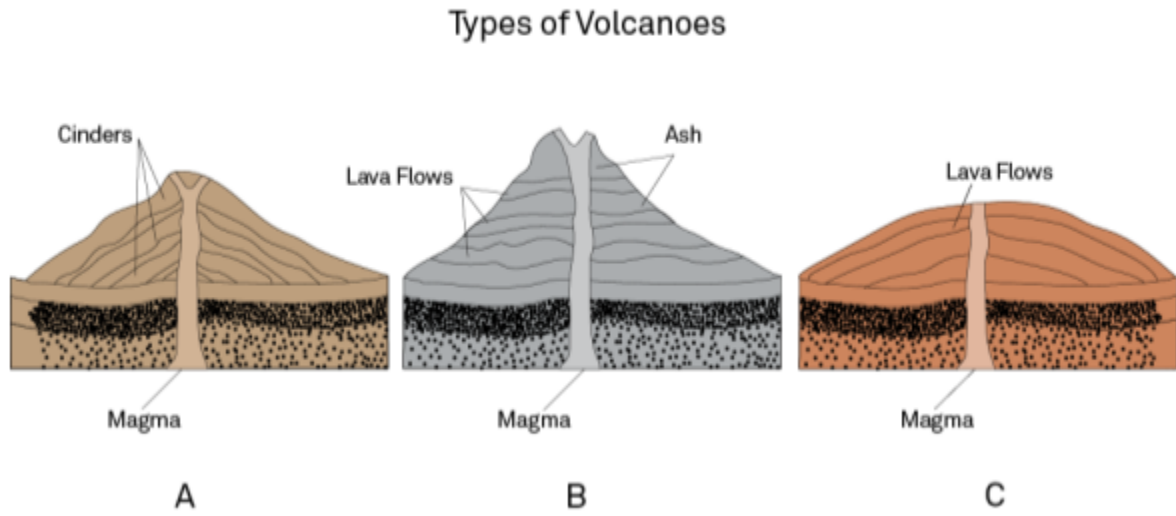


Lesson 2

1. Is lower Texas (circled in red) in danger of volcanic or earthquake hazards? Explain and justify your response. [3]

Lesson 4 Exit Ticket: Volcanic Formation

Directions: Following are images of three different types of volcanoes. Use these images to answer the question.



1. Which volcano would be the safest to live near? Explain. [3]

Lesson 4

2. Which statements below are true? [1]

I. Cinder cone volcanoes form the most rapidly and last the least amount of time.
II. Shield volcanoes have the fastest-running lava when they erupt.
III. Composite volcanoes have the most violent eruptions.

- A. I
- B. II
- C. III
- D. Only I and III

Lesson 5, Day One, Exit Ticket: Measuring Earthquakes

Below are three eyewitness accounts from three different locations of an earthquake that occurred in the United States.

Eyewitness Account
#1 - I was at the hardware store in town when I started to feel the shaking. The items on the shelves started to fall to the ground, and I immediately ran outside and noticed a crack in the side of the building!
#2 - I was doing some organizing in my attic and I felt some shaking. I was a little concerned, but it stopped, so I moved on. Later on that night, I asked my husband if he had felt the shaking, and he said no.
#3 - I was walking home from work, passing by the downtown area of Sacramento. All of a sudden I could barely stand, and bricks started crumbling down off buildings around me. Across the street, the bridge that spans the downtown pond even crumbled into it!

- Using evidence from the text above, rank each eyewitness account using the Modified Mercalli scale. Next to each ranking, identify one key characteristic that helped you determine the correct ranking. [3]

Account	Rank	Evidence from Modified Mercalli Scale
#1		
#2		
#3		

Lesson 5, Day Two, Exit Ticket: Measuring Earthquakes

1. How does a location's distance from the epicenter of an earthquake affect the amount of damage an earthquake can cause there? [1]

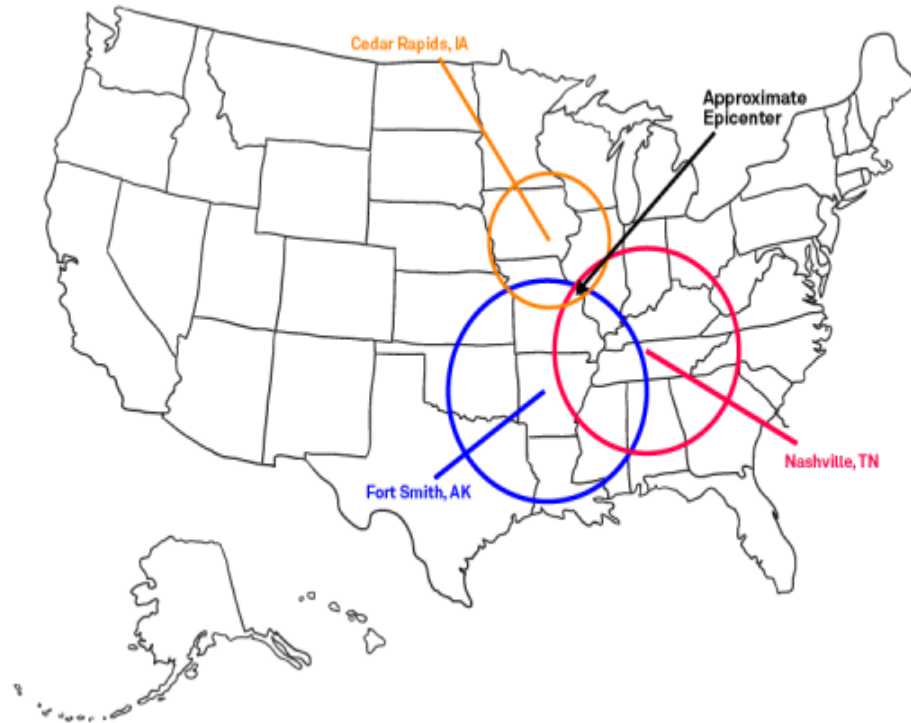
2. Explain your answer to question 1. Include evidence and justify your response. [2]

Lesson 6 Exit Ticket: The Aftermath

1. Which of the following is *not* a negative impact of volcanic ash on the environment? [1]
 - A. Volcanoes provide nutrients to surrounding soil.
 - B. Volcanoes may cause destruction to surrounding villages.
 - C. Volcanoes may release poisonous gas into the air.
 - D. Volcanoes may trigger flash floods and rock falls.

Lesson 7, Day Two, Exit Ticket: Finding the Epicenter

Directions: The following map shows an earthquake epicenter as determined by the process of triangulation. Use the map to answer the following question.

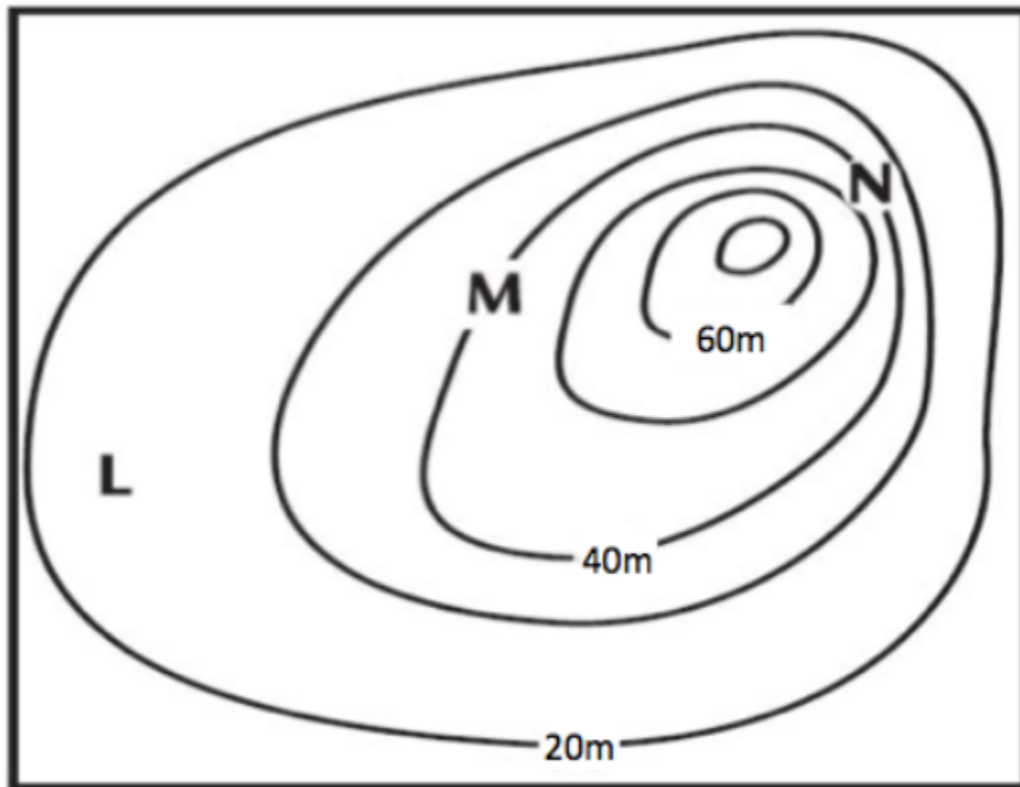


1. Which city on the map likely experienced the greatest intensity of the earthquake? Explain and justify using evidence from the map. [3]

Lesson 8, Day Two, Exit Ticket: Topographic Maps

Reference Sheet 1

Topographic Map of a Volcano



The diagram above shows a topographic map of a volcano. The contour lines show the elevation of the land above sea level. Points L, M, and N represent three different locations on the volcano.

Exit ticket continues on the next page!

Lesson 8, Day Two

Directions: This Exit Ticket is composed of two related questions about topographic maps as a tool to study volcanoes. Use Reference Sheet 1 and your knowledge of science to answer the questions.

1. Which location (L, M, or N) is most likely to experience damage from lava flows during an eruption? Explain. [3]

2. Shade in the area(s) shown on the map that have an elevation between 30 m and 40 m. [1]
3. When walking from point M to point L, which of the following describes your journey? [1]
 - A. Uphill
 - B. Downhill
 - C. Flat surface
 - D. Uphill and downhill