

ESC 115 Physical Geology

Test 3

Spring, 2011

The first 14 questions refer to the slides we will view together in class. Please use the space provided to answer the questions.

1. **(6 pts)** What are three precursor events might have warned these people about the volcanic eruptions soon to come?
2. **(4 pts)** Define risk. How could the figure shown be used in the risk calculations?
3. **(4 pts)** Why are earthquakes at subduction zones likely to cause tsunamis? Draw a figure to help illustrate your answer.
4. **(4 pts)** How do earthquakes transmit energy? How does this relate to the size of the circles shown?
5. **(4 pts)** What is relative sea level? How does it differ from absolute sea level? What causes changes in absolute sea level?

12. **(5 pts)** Who was Oetzi? What are two things that we learned from him?
13. **(5 pts)** What is an estuary? Why is it particularly rich biologically? (Think what all biological organisms need to do.)
14. **(6 pts)** Apply the three approaches to risk analysis that we discussed in class to decide whether or not children under 12 should be required to wear a life jacket at all times while in a boat.
15. **(6 pts)** What are the differences in size and shape between shield volcanoes (Hawaiian style), stratovolcanoes (Mt St Helens style) and cinder cones?
16. **(3 pts)** The area encompassing much of Nevada has interior drainage. What does that mean?
17. **(6 pts)** Describe three ways a stream changes from headwaters to mouth.

18. (6 pts) What are three ways a stream transports sediments?

19. (6 pts) What are three ways urbanization affects flooding? Draw a figure to illustrate your answer.

20. (5 pts) What is one question you reviewed for this test that did not appear on it? Answer it.