## ESC 115 Physical Geology

## Fall, 2014

## Test 2

The first 10 questions refer to the slides we will view together in class. Please use the space provided to answer the questions.

e c	[uestions.							
1.	(6 pts)	Complete the ignormal	eous chart show	n.				
2	(8 pts)	What are four typ	oes of evidence t	that support t	the theory of p	late tectonics.	. Explain ea	ach briefly.
3.	(4 pts) each.	What are the fou	r common ways	s in which mo	untains form?	Extra credi	it: Name a	n example for
4.		We've discussed y are different.	two prominent of	examples of h	otspots in the	U.S.A. Tell l	now they ar	re similar and

5.	(4 pts) How does the figure shown relate to the opening of the Gulf of Mexico?
6.	(4 pts) Explain how the east coast differs from the west coast in terms of tectonics. How do the coast differ from from north to south?
7.	(3 pts) Draw and label a sketch to show how the feature shown formed.
8.	(8 pts) What were Harry Hess's two major contributions to plate tectonics? What did Alfred Wegener propose that eventually led to plate tectonics? Why was it initially rejected?
9.	(3 pts) Explain briefly the figure shown. How does this matter at subduction zones?
10.	(6 pts) Describe briefly three of the videos or stories from this section. To receive full credit, you must link them to geology.

11.	(6 pts) What are three indicators that show a volcano is soon to erupt?  Extra credit: What is a precursor event for another natural hazard?
12.	(4 pts) Based on the chart in question 1, what type of rock is likely to form
	(a) far beneath the volcanic mountains above a subduction zone:
	(b) at eruption at Yellowstone:
	(c) at eruption at Hawaii:
	(d) at eruption at a mid-oceanic spreading center:
13.	(2 pts) The Earth is 4.6 billion years old. Why hasn't it already cooled off?
14.	(2 pts) What is a pillow basalt?
15.	(2 pts) What is the impact of cooling rate upon texture of igneous rocks? Explain in terms of the table from Question 1.
16.	(9 pts) Give an example of a plate tectonic setting at which each of the following rock types would form. Explain the process enough to show you understand it.
	(a) igneous:
	(b) sedimentary:
	(c) metamorphic:

17.	(3 pts) Explain how Mt Kenya and Ship Rock formed.
18.	(6 pts) What are the three tectonic locations at which most of the world's volcanoes occurs?
19.	(6 pts) Sketch a continental-oceanic collision.
20.	(5 pts) What is one thing you've heard in the news, in a non-geology class, or while talking with friends that you understood differently because of having taken this class? Explain how your thinking changed.
21.	(5 pts) Think of one of the review questions that you prepared for this test that has not been asked. Answer it here.