

5. (4 pts) How did the feature shown form?
6. (9 pts) Is the igneous rock shown intrusive or extrusive? Mafic or felsic? How do you know?
7. (4 pts) How is the feature shown similar to the formation of the Gulf of Mexico?
8. (4 pts) The feature shown is an island atoll. How did it form? Draw and label a sketch.
9. (9 pts) How is mountain building related to the rock cycle? Be as specific as possible. Draw and label a sketch if needed.

10. **(6 pts)** How do we know what the bottom of the ocean looks like? Draw and label a passive margin with a midoceanic spreading center.
11. **(6 pts)** Japan is part of an island arc. Sketch and label the type of plate tectonics that formed Japan. How is it different from what formed the Andes?
12. **(4 pts)** Why did the opening of the Gulf of Mexico result in many oil deposits?
13. **(4 pts)** What is paleomagnetism? How did it help us understand mid-oceanic spreading centers?
14. **(4 pts)** Metamorphic rocks are often found in the central portions of mountain chains. Why?
15. **(4 pts)** Explain how continents grow in size. Where do we find the new rock?

16. **(6 pts)** What tectonic feature is the San Andreas fault? Describe what is happening. Why does it result in earthquakes?
17. **(8 pts)** Draw and label a continental-oceanic convergence.
18. **(5 pts)** Think of one of the review questions that you prepared for this test that has not been asked. Answer it here.