1. Over ______% of Earth’s surface is covered by water.

2. Where did the water on Earth come from? Explain in your own words (5pts).

3. Name any two methods that are used today to study the seafloor.
   a. 
   b. 

4. _______________ continental margins have a continental shelf, continental slope, and continental rise descending to the _______________ _______________.

5. _______________ continental margins have continental shelves and slopes, but the slope extends down into a deep _______________ _______________.

6. A mid-oceanic ridge system encircles the globe, typically running down the _______________ of oceans.

7. Continental _______________ - gently (0.1°) seaward-sloping shallow submarine platforms at the edges of continents.

8. Continental _______________ - relatively steep slopes (typically 4-5°, but locally much steeper) that extend down from the edge of the continental shelf to the abyssal plain.

9. What geologic structure on a continental slope is analogous to an alluvial fan?

10. Continental _______________ - gently seaward-sloping (0.5°) wedges of sediments extending from base of continental slope to deep sea floor.

11. An oceanic _______________ is a narrow, deep trough parallel to the edge of a continent or an island and is the deepest parts of the oceans.

12. A _______________ zone is where earthquake foci begin at trenches and dip landward under continents or island arcs.

13. The Mariana Trench is the deepest oceanic trench in the ocean, and extends _______________ feet down from the ocean surface.

14. A _______________ ridge is a giant undersea mountain range extending around the world like the seams on a baseball. Name the characteristics of this geologic structure:
   a. Made mostly of young _______________ flows.
   b. More than _______________ km long, 1,500-2,500 km wide, and rises 2-3 km above ocean floor.
   c. A _______________ valley, 1-2 km deep, runs down the crest of the ridge.
   d. Shallow focus _______________ are common.
   e. Extremely _______________ heat flow.
   f. Often marked by line of hot _______________, supporting unique biological communities.
   g. Offset along _______________ fracture zones.

15. Undersea volcanoes typically produce _______________ basalts.

16. Conical undersea mountains that rise ≥1000 m above the seafloor are called _______________.
17. _______________ are flat-topped seamounts, apparently cut by wave action, and commonly capped with coral reefs.

18. ____________ are wave-resistant ridges of coral and other calcareous organisms. There are three kinds, They are:
   a. ________________ Reefs - encircle islands.
   b. ________________ Reefs - parallel coastlines.
   c. ________________ - rim circular lagoons.

19. Examine the image below, then label each type of reef shown (3pts).

20. Most terrigenous and pelagic sediments on the seafloor can be quite thick at point furthest away from mid-ocean ridges, but are very thin or non-existant at mid-ocean ridges. Why is this the case (5pts)?

21. Oceanic crust is approximately _____ km thick.

22. _________________________ are rock sequences in mountain chains on land that are thought to represent slivers of ocean crust and uppermost mantle.

23. All rocks and sediments of the deep sea floor are less than _________ million years old.

24. Why are earthquakes at mid-ocean ridges shallow (5pts)?

25. How does the age of the rocks that make up the sea floor support the Theory of Plate Tectonics (5pts)?