

Ocean WebQuest Task Sheet

PLEASE REMEMBER TO WRITE IN COMPLETE SENTENCES EXCEPT FOR FILL-IN THE BLANK QUESTIONS.

<http://www.mos.org/oceans/motion/wind.html>

1. The size of a wave depends on _____.
2. Waves travel _____ water, they do not take _____ with them.

<http://www.enchantedlearning.com/subjects/ocean/Waves.shtml>

3. Tsunamis are sometimes called tidal waves, and are different from surface waves: they are usually caused by

_____.

<http://www.mos.org/oceans/motion/currents.html>

4. What do you call the circular patterns in which the world's oceans travel?

5. What body of water can these patterns be compared to?

6. What else causes currents to flow? _____
7. Do all currents have the same characteristics? _____
8. What makes them different?

9. Describe the Gulf Stream by its characteristics.
10. Besides cold water what does the Humboldt current normally bring to the surface?

<http://www.secretsatsea.org/story/3a.html>

11. For what are currents responsible?

12. Major ocean currents maintain their paths like _____.

<http://www.enchantedlearning.com/subjects/ocean/Tides.shtml>

13. Give a definition of tides and explain how what causes them.

<http://oncampus.richmond.edu/academics/education/projects/webunits/cycles/index.html>

14. Tides are created because the Earth and the moon are _____, just like _____ are attracted to each other. The moon tries to pull at anything on the _____ to bring it _____. But, the Earth is able to hold onto everything _____. Since the water is always moving, the Earth cannot _____ onto it, and the moon is able to _____ at it.
15. The side of the Earth that is facing the moon is where it is _____ tide. That is where the moon is _____ at the water. Since the Earth is _____, the area that the moon is pulling at changes. That is why the tides _____. If you are at the beach, and the moon is pulling on the ocean there, it will be _____ tide. If the moon is pulling at the ocean somewhere else, then it will be _____ tide at the beach where you are.
16. How do we know that the water nearest to the moon forms a bulge?
- _____
- _____
- _____
17. Where else does the water form a bulge?
- _____
18. How many tides are there each day? _____
19. How much time is there between tides? _____

<http://www.enchantedlearning.com/subjects/weather/hurricane/landfall.shtml>

20. What is a storm surge?
- _____
- _____
21. What can be the most dangerous part of a hurricane?
- _____

<http://www.geophys.washington.edu/tsunami/movies/globe.mov> (tsunami movie)

<http://www.lacoast.gov/education/FragileFringe/barriers.htm>

21. Although barrier islands, called spits in the northeastern United States, exist on all coastlines, they are most notable along the Gulf of Mexico and Atlantic coasts. They are the structures resulting from the movement of _____ by _____ and the _____. The seaward side of a barrier island is usually a sandy, beach-like area. This area _____ and _____ in size with changes in

seasonal _____ and _____ which carries sand into and away from the sandy shore.

22. Use your newfound knowledge (and your textbook) to construct a chart on white computer paper. This chart should have four components: waves, tides, currents and storms. In each section describe how that type of water movement shapes the shore and include an illustration of each as well.

<http://www.ocean.udel.edu/extreme2002/>

23. Dive in mission to the abyss: go to seafloor geology then click on the Quicktime video to see a real undersea volcano. Click on The Deep Ocean, Mid-Ocean Ridge, Plate Tectonics and Hydrothermal Vents. Pay attention and take notes on things you'd like to include in your model of the ocean floor. Remember your model should include: continental shelf/rise/slope, mid-Atlantic ridges, rifts and trenches.

http://projects.edtech.sandi.net/valencia/explore/ocean_layers.html

24. Sketch the diagram at this site to help you in building your ocean floor model.

<http://www.enchantedlearning.com/subjects/astronomy/planets/earth/Continents.shtml>

25. You have been given two diagrams. Read the definitions then label the outer layers of the Earth and the seafloor spreading (plate divergence) diagrams.

<http://www.enchantedlearning.com/subjects/astronomy/activities/radiobuttonquiz/Tectonicspz.shtml>

26. Take this on-line quiz about plate tectonics. Record your score here _____.

<http://www.amnh.org/nationalcenter/expeditions/blacks smokers/gallery.html>

27. At this site view underwater photos and video clips from ocean floor volcanoes called smokers. Which of the three videos is best. Fully describe what is happening in the video you selected as being best.

http://www.windows.ucar.edu/tour/link=/earth/interior/plate_tectonics.html

28. This picture shows how the rigid outer layer of the Earth, called the _____, is made of plates which fit together like a jigsaw puzzle.

29. Of what are these plates made? _____

30. What allows the plates to "float" on top of the denser material?

<http://www.mos.org/oceans/planet/features.html>

31. What is the Average Depth of the ocean?

32. What is the Deepest point and where is it?

33. What is the highest Mountain and where is it?

34. Around most continents are shallow seas that cover gently sloping areas. What are these areas called? _____

35. Where do the continental shelves end?

36. What is beyond the continental slope? _____

37. Describe the abyss in a complete paragraph.

38. What are the deepest parts of the oceans called?

