

Oceanography Final

Part of the Easy Peasy All-in-One Homeschool, questions/answers from Georgia Virtual Learning

1. What are the four branches of oceanography? (4)
2. More than 70% of the earth's surface is covered in water. True or False? (1)
3. Which ocean basin is the deepest and has the greatest surface area? (1)
4. The largest coral reef system in the world is called the _____ and is located off the coast of _____. (2)
5. The seabed stretching out from the shores of a continent is called the _____. (1)
6. What is the process of sea-floor spreading? (2)
7. Water is made up of what two types of atoms? (2)
8. Why is water referred to as the universal solvent? (2)
9. Put these parts of the hydrologic cycle in order: infiltration, evaporation, precipitation, condensation (4)
10. The saltiness of a body of water is called its _____. (2)
11. The degree of acidity or alkalinity of a liquid is known as its _____. (1)
12. What is dissolved oxygen? (1)
13. You are on a vacation in Las Vegas and while you are there, you and your family attend a magic show. For the grand finale, the magician takes two glasses of water and places them on the table. He then takes an egg and drops it in one glass of water and it sinks right to the bottom. He takes the egg out of the glass and places it into the second glass of water and it floats! Everyone is impressed by the magician's trick, except for you. You immediately know how he managed his magic! Explain how the magician performed his trick from a scientific example. (2)
14. What is the Coriolis Effect? (2)
15. What is an important impact of the Coriolis Effect? (2)
16. Name at least two causes of ocean currents? (2, extra credit for more)
17. Currents are important in marine ecosystems because they redistribute water, heat, nutrients, and oxygen about the ocean. At the same time, currents inevitably sweep over and carry off living

organisms. Write two ways that current flows might affect ocean organisms and species. (4, There is no absolute answer, so just be thoughtful in your response.)

18. This ocean current was named by Benjamin Franklin. It carries warm water from the Gulf Coast up the Eastern seaboard of America. Name it. (1) _____

20. These describe where water moves vertically. (2)

21. Easterly surface winds found in the tropics near the equator. (1)

22. _____ are the waves that are generated by the gravitational pull of the sun and the moon. (1)

23. Earthquakes can cause large ocean waves by transmitting the energy from the moving earth to the water. The resulting wave is called a _____. (1)

24. What zone is the area that is exposed at low tide and submerged at high tide? (2)

25. How do upwellings help fish in the surface waters? (2)

26. What are plankton? (2)

27. What type of organism breaks down the body of a dead animal? (1)

28. How do the carbon and oxygen cycles work together? (4)

29. Three biological limiting factors include: competition, predation, and herbivory. Take each one and describe how it causes a decrease in living organisms. (3)

30. Name one type of symbiotic relationship. Define it and give an example of it. (3)

31. What is the name of a long narrow island that runs parallel to the coast and offers some protection to the mainland against storms. (1)

32. Define wetlands and give an example of a type of wetland. (2)

33. What is a semi-enclosed body of water where the salt water of the ocean meets fresh water of a river? (1)

34. Name two threats to the coral reefs? (2)

35. As you have learned, the producers of the sea are huge groups of microscopic, single celled plants known collectively as phytoplankton. They are responsible for providing the foundation for the marine food chain. However, there are also organisms found deep in the ocean that use the heat, chemicals and minerals found near volcanic vents to produce food.

Which organisms do you think are the more efficient producers? Why? (4)

36. Animals in the Echinodermata Phylum often have spines and radial symmetry. Name one member of the phylum. (1)

37. The animals in the Mollusca Phylum are vertebrates. True or False? (1)

38. Name a crustacean? (1)

39. Jawless, cartilaginous, and bony are the three types of what? (1)

40. Name two reptiles that live in the water. (2) Name two more for extra credit, but minus 1 point for any wrong answer.

41. Birds are endotherms. True or False? (1)

42. What type of animal is being described? warm blooded vertebrates that have hair, breathe air, live birth, and are cared for by and receive milk from the mother (1)

43. Shark skeletons are made of cartilage. True or False? (1)

44. Give two manatee facts. (2)

45. Name two things that you think should be done to help and protect the oceans and ocean dwellers. (2)

46. How do humans use the ocean for food, commerce, and energy? (3)

47. Why is the ocean critical for human life? (4)

48. Explain how waves, tides, and sea level influence the physical structure of the shore. (3)

49. Describe the relationship between biotic and abiotic factors in marine ecosystems. (4)

50. Name five ways marine organism adapt to live in the ocean and seawater? (5)