

Final Semester Exam 2008

PreAP Biology

1. Are viruses alive?
2. As an organism's environment changes, SEXUAL reproduction improves a species' ability to_____.
3. Be able to label identify the levels in a food chain.
4. Compare and contrast between a eukaryotic and prokaryotic cell.
5. Compare and contrast between plant and animal cells.
6. Contrast between endothermic and ectothermic animals.
7. Define a food web.
8. Define producer and give an example.
9. Define symbiosis. List and explain example of symbiotic relationships.
10. Describe an annelid?
11. Describe the appendages of arthropods?
12. Describe the life of a sessile animal.
13. Example how amphibians breathe during the different stages of their life cycle?
14. Examples of modern jawless fish?
15. Explain the leaf and root adaptation of prickly-pear cactus to the environment.
16. First vertebrates to evolve were?
17. Function of swim bladder?
18. How do mushrooms obtain energy? Are they photosynthetic?
19. How do sponges (Porifera) feed?
20. How is bacteria treated? Viruses?
21. Immigration vs. emigration.
22. In angiosperms, reproduction takes place in_____?
23. Is AIDS a viral or bacterial?
24. Know the rules of scientific naming.
25. Know the shapes of bacteria.
26. List abiotic and biotic factors.
27. List characteristics of mammals.
28. List main characteristics of ALL birds?
29. List the biochemical cycles, what do these cycles ensure?
30. List the kingdoms of eukaryotic organism.
31. List the types of plant responses, called tropisms.
32. Lytic vs. lysogenic infection.
33. Two body types of Cnidarians.
34. Warm-blooded animals with hair and mammary glands are in what class?
35. What are organisms that obtain nutrients by breaking down dead and decaying plants and animals called?
36. What are small, photosynthetic organisms found near the surface of the ocean are called? Why are they the most important group of organism on our planet?
37. What are the bristlelike structures on some annelids' bodies?
38. What are the combined portions of Earth in which all living things exist is called?
39. What are the techniques/rules for identifying bacteria?

40. What are the three main groups of mammals?
41. What do ALL organisms have in common?
42. What do bacteriophages infect?
43. What do similar genes between two organisms indicate?
44. What do the vascular tissues xylem and phloem transport?
45. What does a ripened ovary develop into?
46. What flower structure produces pollen?
47. What is a fruiting body?
48. What is a multicellular, eukaryote that produces oxygen?
49. What is a nerve net?
50. What is a pathogen? List examples.
51. What is a tangled mass of hyphae?
52. What is a nematocyst? What are 2 functions of nematocysts?
53. What is an organism that feeds only on plants and animals?
54. What is an organism that feeds only on plants?
55. What is an organism's niche?
56. What is the "reserve copy" of genes in paramecium?
57. What is the branch of biology dealing with interactions among organisms?
58. What is the early stage of plant embryo?
59. What is the function of a plant stem?
60. What is the function of the sclerox?
61. What is the greenhouse effect? Can we survive without it? Is it natural?
62. What is the long flexible supporting rod found in chordates?
63. What is the main function of feathers?
64. What is the main role of bacteria in the environment?
65. What is the outer protein covering of a virus called? What does this protein coat protect?
66. What is the significance of *Penicillium*?
67. What is the symmetry of an animal with equal left and right sides?
68. What is the term for each step in the transfer of energy and matter within a food web?
69. What is the ultimate, but not only, source of energy in most ecosystems?
70. What material contains the instructions to make new copies of viruses?
71. What percent of energy can be passed from one trophic level to the next?
72. What process is carried-out by plants? What is required? Without gas exchange, what would plants be unable to generate?
73. What process is carried-out by yeast? What gas is not required? What gas is generated?
74. What structure anchors a plant?
75. What structure carries-out photosynthesis?
76. What structure in plant exchanges gases with the atmosphere? What does it look like? Where is it found on the leaf?
77. What substances allow plants and algae to obtain energy from the sun?
78. What type of root is a carrot?
79. Where are arthropods found?
80. Which are the 3 groups of protists? How does each obtain energy?
81. Which group of chordates has a backbone?
82. Why do arthropods molt?