-10-Q2W8-Quarter 2 Rvision-H.W.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. A mechanism of Darwin's proposed theory is _____.
a. artificial selection
b. evolution
c. variation
d. all of these

____ 2. Slime molds are said to be like animals during much of their life cycle because they _____.
a. reproduce by making spores
b. move about and engulf food
c. look like animals
d. grow on rotting leaves or tree stumps

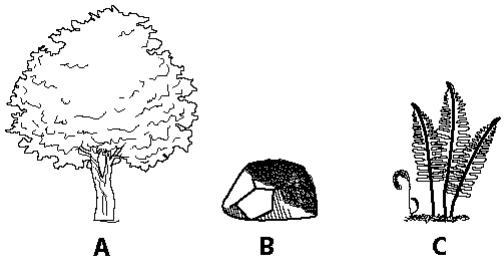

Figure 22-2

____ 3. Which of the plants shown in Figure 22-2 has a dominant gametophyte generation?
a. B
b. C
c. A
d. all of them

____ 4. Which of the plants shown in Figure 22-2 uses alternation of generations to reproduce?
a. C
b. A
c. B
d. all of them

____ 5. Which of the plants shown in Figure 22-2 uses seeds to reproduce?
a. C
b. B
c. A
d. all of them

____ 6. Which of these are vascular plants?
a. spike mosses
b. ferns
c. club mosses
d. all of these

____ 7. A pattern of evolution that results when two unrelated species begin to appear similar because of environmental conditions is _____.
a. directional selection
b. divergent evolution
c. disruptive selection
d. convergent evolution

____ 8. Which of the following are considered BOTH a vascular and non-seed plant?
a. Hepatophytes
b. Coniferophytes
c. Pterophytes
d. Bryophytes

____ 9. What is the movement of genes into and out of a gene pool called?
a. nonrandom mating
b. gene flow
c. direct evolution
d. random mating

____ 10. An amoeba engulfs food by _____.
a. forming cysts
b. using its oral groove and the action of cilia
c. osmosis
d. surrounding the food with pseudopodia

____ 11. Viruses are found in _____.
a. water
b. soil
c. air
d. all of these

____ 12. Horsetails are _____.
a. lycophytes
b. pterophytes
c. bryophytes
d. arthrophytes

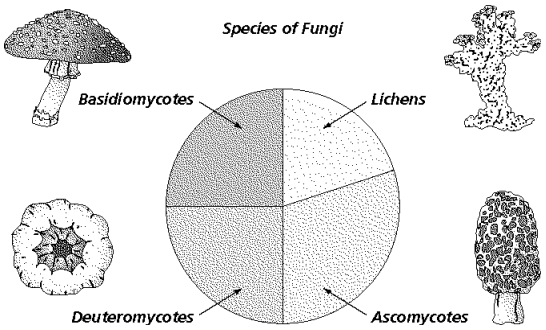

Figure 20-4

____ 13. According to Figure 20-4, which type of fungi has the most species?
a. deuteromycotes
b. basidiomycotes
c. ascomycotes
d. lichens

____ 14. Mushrooms, which are basidiomycostes, make up what percentage of the fungi species, according to Figure 20-4?
a. 20%
b. 4%
c. 50%
d. 25%

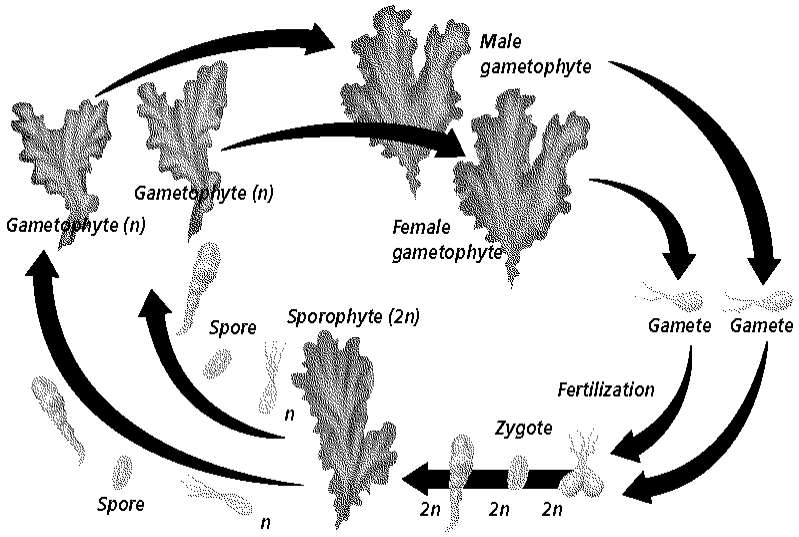

Figure 19-4

____ 15. When does meiosis occur in Figure 19-4?
a. when the spores form
b. when the zygotes form
c. when the male and female gametophytes form
d. when the gametes form

____ 16. When does mitosis occur in Figure 19-4?
a. only as the zygote forms
b. only as spores grow into gametophytes
c. any time there is cellular growth
d. only when the male and female gametophytes make the gametes

____ 17. While looking for fossils on an eroded hillside, you discover fossil coral and fish in one layer. In a layer just above, you find the fossil imprint of a fern frond and some fossil moss. Assuming the rock has not been disturbed, which of the following is the most probable conclusion?
a. The area had been a sea until recent times.
b. A forest had once grown there but had become submerged by water.
c. A saltwater sea had changed to a freshwater lake in ancient times.
d. A sea had been replaced by land in ancient times.

____ 18. Although all plants produce spores only _____ produce flowers.
a. Ginkgophytes
b. Coniferophytes
c. Anthocerophytes
d. Anthophytes

____ 19. The primitive Earth atmosphere is hypothesized to have consisted mostly of _____.
a. oxygen, nitrogen, and water vapor
b. amino acids, ATP, carbohydrates, and oxygen
c. hydrogen, methane, ammonia, and water vapor
d. none of these

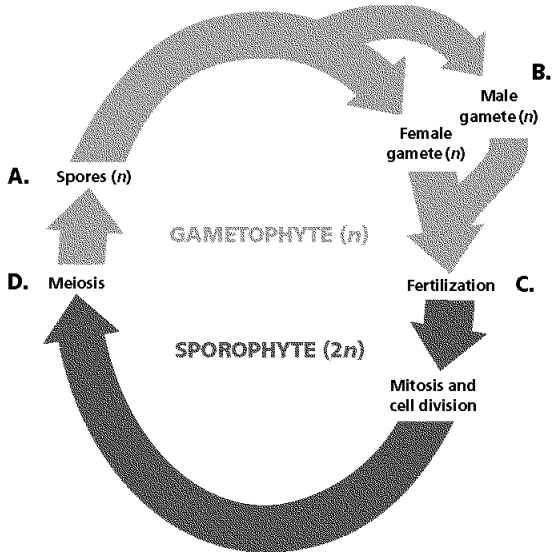

Figure 21-2

____ 20. Where are seeds developed in Figure 21-2?
a. C
b. B
c. A
d. D

____ 21. Where does the sexual reproductive cycle begin in Figure 21-2?
a. D
b. C
c. A
d. B

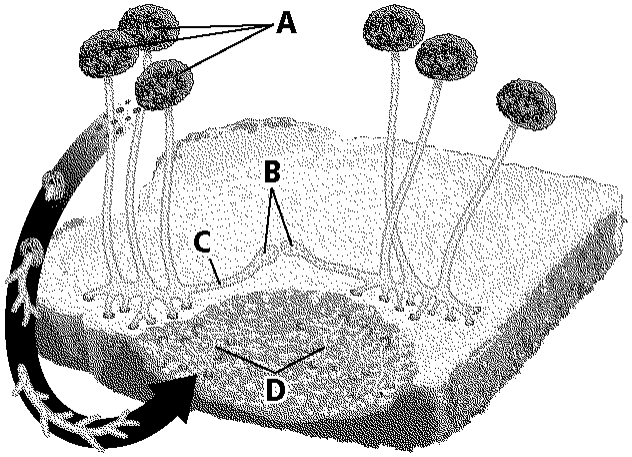

Figure 20-2

___ 22. In Figure 20-2, which structures gather nutrients?
a. D
b. C
c. B
d. A

____ 23. In Figure 20-2, what would cause a zygospore to form at B?
a. heat
b. unfavorable environmental conditions
c. an overabundance of food
d. moisture

___ 24. In Figure 20-2, where are spores formed?
a. C
b. A
c. D
d. B

____ 25. Anthophytes that live for only one year or less are called _____.
a. annuals
b. dicots
c. perennials
d. biennials

____ 26. Members of the Kingdom Protista have _____.
a. one or many cells
b. membrane-bound organelles
c. a wide variety of sizes and shapes
d. all of these

____ 27. Which group of organisms is believed to have been the earliest to evolve?
a. cyanobacteria
b. aquatic dinosaurs
c. mammals
d. land plants

____ 28. Which of the following is <u>not</u> a factor that causes changes in the allelic frequencies of individuals in a population?
a. directional selection
b. stabilizing selection
c. disruptive selection
d. random selection

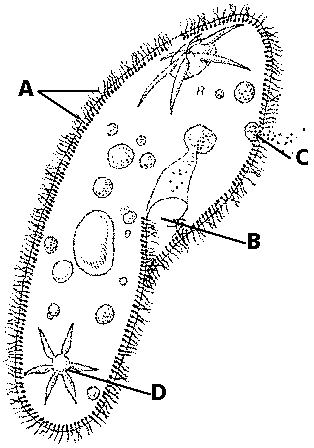

Figure 19-2

____ 29. Which structure shown in Figure 19-2 is used for locomotion?

a. D
b. A
c. C
d. B

____ 30. Within a decade of the introduction of a new insecticide, nearly all of the descendants of the target pests were immune to the usual-sized dose. The most likely explanation for this immunity to the insecticide is that _____.

a. the pests developed physiological adaptations to the insecticide
b. eating the insecticide caused the bugs to become resistant to it
c. it destroyed organisms that cause disease in the insects, thus allowing them to live longer
d. eating the insecticide caused the bugs to become less resistant to it

____ 31. The fronds of ferns are divided into leaflets called _____.

a. cycads
b. rhizomes
c. pinnae
d. sori

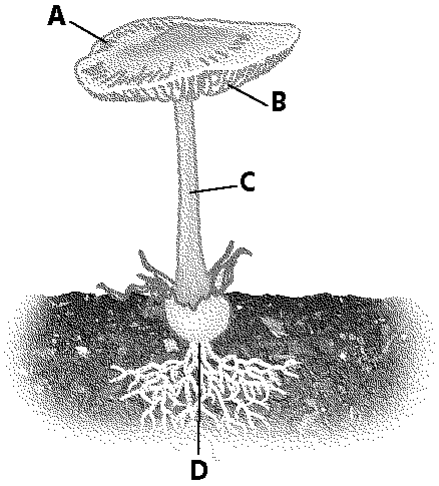

Figure 20-3

____ 32. Where are spores released in the organism shown in Figure 20-3?
a. C
b. B
c. A
d. D

____ 33. Where does meiosis in the organism shown in Figure 20-3?
a. A
b. D
c. B
d. C

____ 34. During the gametophyte generation, a green alga _____.
a. reproduces asexually
b. has the haploid number of chromosomes
c. has the diploid number of chromosomes
d. develops from a zygote

____ 35. Penicillin kills bacteria by _____.
a. depriving them of nutrients
b. consuming them
c. causing holes to develop in their cell walls
d. imprisoning them

____ 36. Most sporozoans reproduce by _____.
a. both sexual and asexual reproduction
b. fragmentation
c. sexual reproduction only
d. conjugation

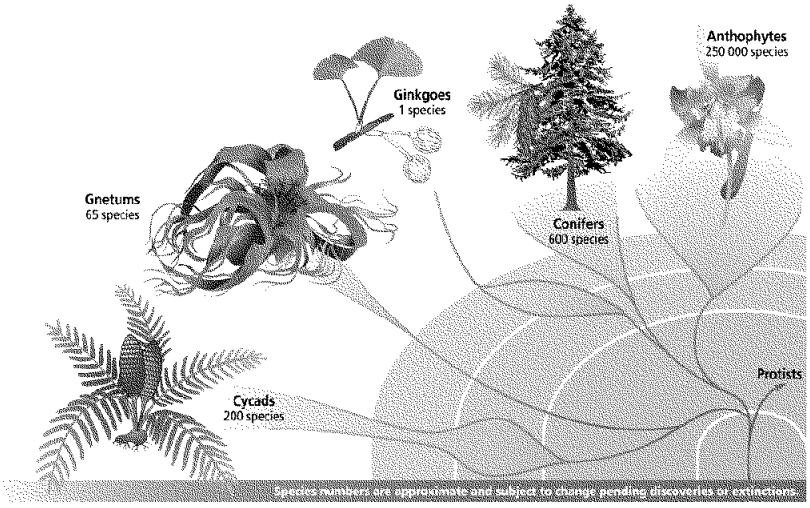

Figure 22-6

____ 37. According to Figure 22-6, which species was the fastest to differentiate from the rest of the ones shown?
a. anthophytes
b. gnetums and cycads
c. anthophytes, conifers, and ginkos
d. conifers and ginkos

___ 38. What can be inferred from Figure 22-6?
a. seed plants are more closely related to protists than non-seed plants
b. ginkos only grow in one area of the world
c. there used to be more than one species of ginkos
d. anthophytes are the most common seed plants

____ 39. The theory of continental drift hypothesizes that Africa and South America slowly drifted apart after once being a single landmass. The monkeys on the two continents, although similar, show numerous genetic differences. Which factor is probably the most important in maintaining these differences?

a. comparative embryology
b. geographic isolation
c. fossil records
d. comparative anatomy

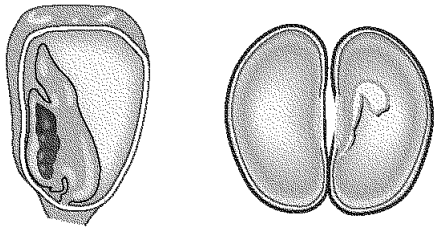

Figure 22-5

____ 40. You pick a flower off the plant that produced the seed shown to the right in Figure 22-5. What is a possible number of petals this flower could have?

a. 8
b. 3
c. 7
d. 6

___ 41. How are the vascular tissues bundled in the stalks of the seed shown to the left in Figure 22-5?

a. scattered
b. they do not exist
c. in a ring
d. net-like

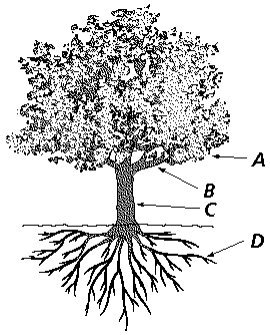

Figure 21-3

____ 42.Refer to Figure 21-3. Which structure is used for the transportation of nutrients?

a. B
b. C
c. A
d. D

____ 43. Refer to Figure 21-3. Removing which structure would cause this plant to starve?

a. C
b. D
c. B
d. A

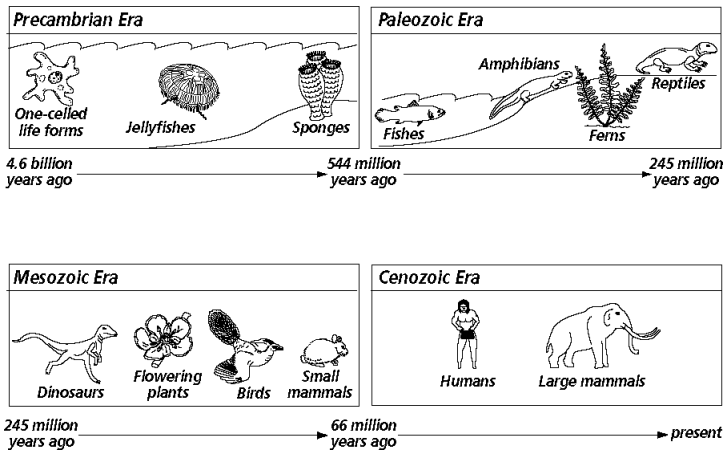

Figure 14-4

____ 44. According to Figure 14-4, the correct chronological order of organisms as they develop are _____.
a. birds, dinosaurs, jawed fish, prokaryotes
b. prokaryotes, jawed fish, dinosaurs, birds
c. dinosaurs, jawed fish, birds, prokaryotes
d. jawed fish, dinosaurs, prokaryotes, birds

____ 45. According to Figure 14-4, in how many eras have mammals existed?
a. 2
b. 5
c. 4
d. 7

____ 46. According to Figure 14-4, what was the earliest form of multicellular life on Earth?
a. fish
b. invertebrates
c. land plants
d. reptiles

____ 47. In hyphae divided by septa, cytoplasm flows from one cell to the next through _____.
a. spores
b. pores
c. chitin
d. haustoria

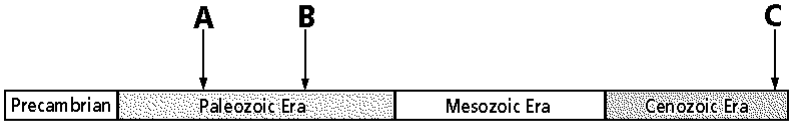

Figure 22-3

____ 48. What type of plant died out in the time marked B in the timeline shown in Figure 22-3?
a. non-seed vascular plants
b. vascular plants
c. seed plants
d. nonvascular plants

____ 49. Which of the following fossils are not found in sedimentary rock?
a. frozen mammoths
b. imprints
c. petrified wood
d. amber

____ 50. What type of adaptation is shown in Figure 15-4?

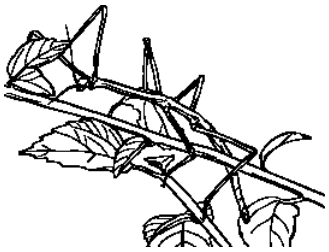

Figure 15-4

a. homologous structure
b. camouflage
c. artificial selection
d. mimicry

____ 51. A protozoan that moves by lashing one or more of its whiplike parts is a(n) _____.
a. sporozoan
b. flagellate
c. water mold
d. thallus

____ 52. Urey and Miller subjected water, ammonia, methane, and hydrogen to heating and cooling cycles and jolts of electricity in an attempt to _____.
a. form complex organic compounds
b. determine how the dinosaurs became extinct
c. find out how ozone forms in the atmosphere
d. determine the age of microfossils

____ 53. A structure in some bacteria that is resistant to adverse environmental factors is a(n) _____.
a. autotroph
b. coccus
c. endospore
d. prophage

____ 54. The science of grouping and naming organisms is _____.
a. nomenclature
b. taxonomy
c. phylogeny
d. classification

____ 55. Structures that have a similar evolutionary origin and structure but are adapted for different purposes, such as a bat wing and a human arm, are called _____.
a. homozygous structures
b. embryological structures
c. analogous structures
d. homologous structures

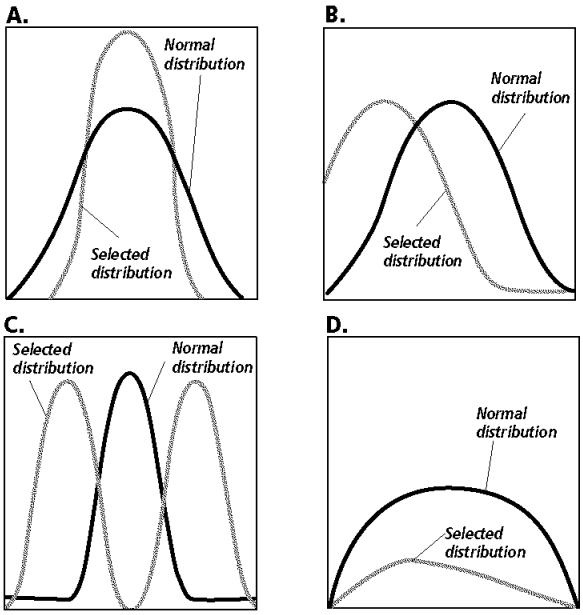

Figure 15-6

____ 56. Which type of natural selection shown in Figure 15-6 would favor giraffes that need to reach the tallest branches to eat?

a. C
b. D
c. B
d. A

____ 57. Which of the following statements are true about fossils?

a. There are many different ways that fossils can be formed.
b. Fossils are usually found in sedimentary rock layers.
c. Fossil insects that were trapped in ice or hardened into amber.
d. all of these

____ 58. A(n) _____ is a virus that infects a bacterial cell.

a. plasmid
b. decomposer
c. bacteriophage
d. endospore

____ 59. Since the 1950s, experiments have been conducted that lead scientists to conclude that life may have originated _____.

a. in other parts of the universe
b. when prokaryotes joined together to make the first eukaryotic cell
c. in small pools of water where amino acids could be concentrated
d. spontaneously as originally thought

____ 60. Which of the following processes brings about an exchange of genetic information between bacterial cells?

a. replication
b. binary fission
c. mutualism
d. conjugation

___ 61. Why might the beak of the Akialoa, pictured in Figure 15-7, developed this way?

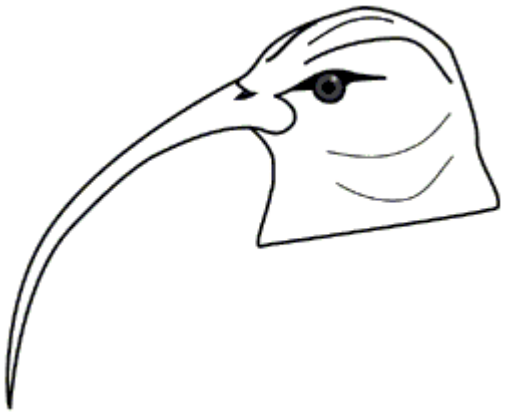

Figure 15-7

a. to reach nectar in flowers
b. to crack open seeds
c. to dig through tree bark for insects
d. to scoop up fish

____ 62. A clear fish imprint in a rock indicates that the rock is probably _____.
a. igneous
b. metamorphic
c. sedimentary
d. volcanic

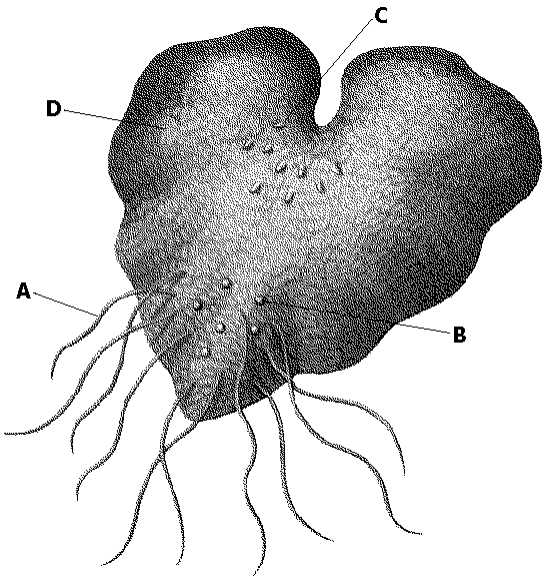

Figure 22-4

____ 63. Where is the structure shown in Figure 22-4 located?
a. in the root
b. in the ground
c. in the leaves
d. in the stalk

____ 64.Both algae and plants store their food in the form of _____.
a. glycogen
b. glucose
c. proteins
d. cellulose

____ 65. A group of related classes of plants is a _____.
a. division
b. taxon
c. database
d. kingdom

____ 66. Which answer BEST shows an animal's adaptation to the tropical rain forest?
a. an elephant's long trunk
b. camouflage in a tree frog
c. migration of birds in winter
d. the long neck of a giraffe

____ 67. Fossil and genetic evidence suggests that _____ were the first land plants.
a. lycophytes
b. liverworts
c. mosses
d. horsetail

____ 68. Scientists agree that two developments must have occurred for life to come into being: the formation of simple organic molecules important to life and _____.
a. development of prokaryotic cells in early oceans
b. organization of molecules into complex organic molecules
c. appearance of amino acids, monosaccharides, and lipids
d. an atmosphere rich in water vapor, oxygen, and ATP

____ 69. Which of the bacteria is the cause of pneumonia?
a. rickettsia
b. staphylococci
c. streptococcus pneumoniae
d. Treponema pallidum

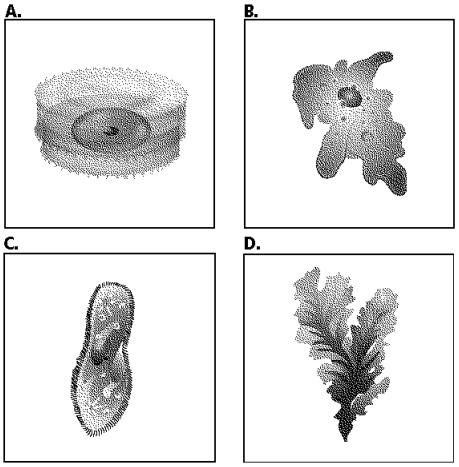

Figure 19-3

____ 70. Which of the protists shown in Figure 19-3 would use a pseudopod?
a. C
b. D
c. A
d. B

____ 71. Which of the protists shown in Figure 19-3 has the hardest exterior?
a. D
b. B
c. C
d. A

____ 72. Which protist group produces much of the oxygen on Earth?
a. algae
b. diatoms
c. water molds
d. slime molds

____ 73. Which of the following is not a dicotyledon?
a. dandelion
b. maple tree
c. lettuce
d. grass

____ 74. An anthophyte differs from a conifer in that _____.
a. its seeds are enclosed in a fruit
b. it produces seeds
c. it is deciduous
d. it has vascular tissue

____ 75. Which of the following is NOT an evolutionary adaptation in bacteria?
a. They reproduce rapidly.
b. They cannot exist under adverse conditions.
c. They can utilize substances harmful to other organisms.
d. They have a high rate of mutation.

____ 76. The structures shown in Figure 15-5 are _____.

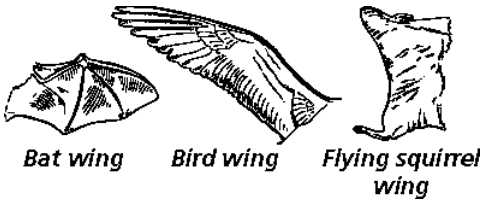

Figure 15-5

a. heterologous
b. vestigial
c. homologous
d. analogous

____ 77. Economically important members of the phylum Oomycota include _____.
a. cellular slime molds
b. plasmodial slime molds
c. water molds
d. all of these

____ 78. Which fact is the basis for using the fossil record as evidence that evolution has taken place?
a. There are fossils of all life-forms to be found in rock layers.
b. In undisturbed layers of rock strata, the older fossils are found in the deeper layers.
c. Fossils have been shown to provide a complete record of human evolution.
d. All fossils were formed at the same time.

____ 79. Fossils of fungi are rare due to _____.
a. their late appearance on the Geologic Time Scale
b. their composition of soft materials
c. their lack of species diversity
d. their ability to form protective zygospores

____ 80. Which of the following are NOT considered non-seed plants?
a. Coniferophytes
b. Anthocerophytes
c. Hepatophytes
d. Bryophytes

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