2017 3rd 9 Weeks Benchmark Review – Evolution, Ecology, & the Skeletal/Muscular/Integumentary System

Evolution:

1. Define Species – A group of similar organisms that can mate with each other and produce fertile offspring.
2. Darwin inferred that the organisms of the Galapagos Islands must have come from the _mainland_____ of South America because they were so similar to the organisms there.

3. Darwin noticed that the finches had beak adaptations based on the _food_____ available on their particular island.

4. Define Variation – Differences in members of the same species.
5. When a new species forms it is usually because a group is _separated (isolated) from the rest of the species (think about the birds on clipbird island)

6. A fossil_ is the preserved remains of an organism from long ago. Most of these are formed when a dead organism becomes buried in _sediment_____.

7. What is the difference between relative dating and radioactive dating?
   Relative dating compares two fossils and can tell which one is older based on how many layers down they are found in sedimentary rock.

   Radioactive dating gives an actual date and is based on the half-life of a radioactive element found in the rocks.
8. Organisms which are better adapted to their environment are more likely to survive and reproduce. This is called "survival of the fittest" or ____natural selection_____.

9. Which explanation of evolution states that it occurs steadily in tiny changes over long periods of time and has intermediate species ? ___gradualism_____.

10. What does the punctuated equilibria theory of evolution say? That evolution occurs rapidly in short bursts __. Would there be an intermediate species? _no_____.

11. What does the word extinct mean? A species that has no living members

12. What is an adaptation? A trait that helps an organism survive and reproduce.

13. Natural selection leads to __evolution___ which is the gradual change of a species over time.

14. What are homologous structures? Similar structures that related species have inherited from a common ancestor.

15. efine branching tree. A diagram showing how scientists think differenct groups of organisms are related.

16. Creating more offspring than can possibly survive is called _overproduction _____.

ECOLOGY

17. Define:

Producers – organisms that make their own food (autotrophs)
Scavengers – feed on the bodies of dead organisms (vultures)
Decomposers – help to Break down dead organisms
Consumers – organisms that consume other organisms (heterotrophs)
- Omnivores – eat both producers and consumers
- Carnivores – only eat consumers
- Herbivores – only eat producers

18. A food chain shows one feeding relationship. Overlapping food chains form __food web_____.
19. Food chains always start with a producer which is eaten by a primary consumer , which is eaten by a _secondary____ consumer, which can be eaten by a __tertiary_____ consumer.
20. The _energy pyramid_____ is a diagram that shows the amount of energy that moves from one feeding level to the next. Only _10_____ % of the energy transfers up . The most available energy is at the bottom - the producer level.
21. What is the difference between biotic and abiotic? A Biotic factor is a living factor in an ecosystem (bird) . An Abiotic factor is a nonliving factor in an ecosystem (rock)

22. In the water cycle water evaporates which means is changes from a ___liquid_____ to a ____gas_____.

23. In the water cycle water condensates which means it changes from a __gas_____ to a _____liquid_____.

24. What are examples of precipitation? Rain, snow, sleet, and hail

25. An organisms home is its Habitat_____ which provides it with food, water , and shelter.

26. An organisms way of life is known as its __niche_____.

27. An Organism would be like one single squirrel. All the squirrels in an area would be a _populations_____. All the squirrels and all the other living things would be a _community_____. All the living things plus the abiotic factors would be a ____ecosystem_____. All the Earth where life exists is the __biosphere_____.

28. ***Direct observation*** would be when you count the members of a population. **Indirect observation** would be like counting the nests of birds and not the birds themselves. ___sampling_____ method would be counting the number of organisms in a small area and multiplying to estimate the number in a larger area.
__mark/recapture_____ method would be to catch organisms and mark them and then release them and catch them again.

29. What is the difference in immigration and emigration?immigration are organisms coming INTO the community. Emigration are organisms LEAVING the community

30. Define Carrying Capacity - the maximum number of organisms an area can support.

31. The _limiting factor_____ is anything that causes a population to be "limited" or not increase in number

32. What is the predator and the prey? The predator is the organism that hunts and eats the prey

33. A close relationship between two different species is _symbiosis_____.

34. This symbiosis is (+) (+) __mutualism_____, this is (+) (-) _ parasitism_____ this is (+) (0) _ commensalism _____.

35. Ecology is __the study of organisms and their interactions with each other and their environment. _____.

Skeletal/Muscular/ Integumentary – we just had a test on this! Study your study guide from this unit!