



1.0 Biological Diversity is reflected in the variety of life on Earth

Student Name _____

Class _____

1.1 Examining Diversity

1. A group of organisms that have the same structure and can reproduce with one another are considered to be ...
A. order
B. family
C. genus
D. species

2. Biotic and abiotic things interact within the same environment. An example of an abiotic part of an environment is ...
A. grass
B. flowers
C. water
D. insects

3. The entire collection of the many different types of organisms on the Earth is called ...
A. The Living Kingdoms
B. Biological Diversity
C. A World of Animals
D. The Living Ecosystem

4. How many different types of species have live on the Earth, since life began - roughly 5 billion years ago? Scientist estimate that the **species alive today** represents this percentage of all the species that have ever lived on the Earth ...
A. 19%
B. 15%
C. 11%
D. 1%

5. When **populations** of different species live together within the same area, these populations form what is known as a ...
A. collection
B. congregation
C. community
D. ecosystem

6. Although the same species may have the same basic structure, variations exist within the same species. The **variations** among the members of a population is referred to as ...
A. genetic diversity
B. biotic diversity
C. species diversity
D. living diversity

7. The distribution of species on the Earth is not even. The area around the equator is where the most diverse plant species exists. This makes for the greatest biological diversity in tropical ...
A. rainforests
B. tundra
C. deserts
D. grasslands



8. Closely related species have the same **genus** name, but different **species** names. This makes for identification based on ...
- A. habitat
 - B. structure**
 - C. coloring
 - D. names
9. The **five-kingdom classification system** used by scientists includes: ...
- A. Animalia, Plantae, Fungi, Protista, Bacteria
 - B. Animalia, Plantae, Fungi, Virus, Bacteria
 - C. Animalia, Plantae, Fungi, Monera, Carnivore
 - D. Animalia, Plantae, Fungi, Protista, Monera**
10. The system that is used to classify individual organisms is ordered from general classification to very specific identification. The correct order of this classification system is ...
- A. phyla, class, order, kingdom, genus, species, family
 - B. family, order, phyla, genus, class, kingdom, species
 - C. kingdom, phyla, class, order, family, genus, species**
 - D. species, class, family, order, kingdom, genus, phyla
11. These areas, like the rainforests of the equator, have diverse collections of species. They are known as the **"amazons of the oceans"** because of the richness of their diversity. These area are called ...
- A. coral reefs**
 - B. aspen parklands
 - C. serengeti plains
 - D. botanical gardens

1.2 Interdependence

12. Interdependence of species occurs because no species can survive by itself. Each species is dependent on many other species in its environment. One of the most obvious examples of this interdependence is the relationship known as ...
- A. scavengers
 - B. predator-prey**
 - C. herbivores
 - D. forage-food
13. Another type of interdependence is called **symbiosis**. There are several types of symbiosis. The differences between each type are determined by how beneficial or harmful the relationship is. When both species in the relationship benefit, it is called ...
- A. mutualism**
 - B. colonialism
 - C. parasitism
 - D. commensalism
14. A symbiotic relationship where one species benefits and the other species is harmed is called ...
- A. commensalism
 - B. mutualism
 - C. parasitism**
 - D. colonialism



15. There is one type of interdependent relationship in which the interaction between the species indicates that **neither species benefits**. This type of interaction is called ...
A. cooperative dependence
B. interspecies cooperation
C. interspecies competition
D. dependent cooperation
16. Each organism in an ecosystem has a role. It includes what it eats, what food it provides for other organisms, its habitat, and its effect on the other organisms it shares space in the environment with. This role is called a ...
A. mycorrhizae
B. partition
C. niche
D. forager
17. Another type of interdependent relationship involves the sharing of resources within the same environment among different organisms. This sharing is called resource ...
A. partitioning
B. allocation
C. development
D. competition
18. **Barnacles** are organisms that attach themselves to whales to move throughout the different parts of the ocean. They benefit from their relationship with the whales, but the whales are not harmed, nor do they benefit. This type of symbiotic relationship is called ...
A. mutualism
B. mycorrhizae
C. parasitism
D. commensalism

1.3 Variation Within Species

19. Not every member of every species is exactly the same. There are differences, called **variations**, which make the individuals within a species unique. This variation within a species is called ...
A. commonality
B. variability
C. selectivity
D. genetics
20. Variation within a species may not be something that is immediately noticeable. Often variability is a characteristic that may help or hinder a species' adaptation to a change in the environment. A species is more likely to survive when there is ...
A. little variation
B. common variation
C. great variation
D. no variation at all
21. Over time, some deadly organisms become resistant to antibiotics, that are designed to kill them. Scientists think this resistance is due to ...
A. species specialization
B. over prescription of antibiotics
C. resource partitioning
D. frequency specialization



22. The ***banded snail*** lives in a wide range of habitats. Its shell color has many variations, sizes and numbers of bands. Scientists explain the reason for this variation by referring to the ...
- A. type of predator it has
 - B. locomotion ability it has
 - C. natural instincts it has
 - D. the changing of the seasons
23. When individuals within a species survive a change in the environment and other individuals do not survive, the process is known as ...
- A. selective breeding
 - B. natural selection
 - C. artificial selection
 - D. interspecies breeding
24. Charles Darwin observed a large orchid on the island of Madagascar and predicted the existence of an organism that could feed on the nectar of this plant (located at the base, 20-30 cm from the top). The moth, which feeds on the nectar of this orchid, was discovered 40 years later. It had adapted to the unusual location of nectar by ...
- A. poking the bottom with it's proboscis
 - B. having a long proboscis
 - C. tipping the orchid upside-down
 - D. relying on a caterpillar to puncture the nectar tube
25. Less or no diversity within a group of living things is usually attributed to ...
- A. extinction
 - B. adaptation
 - C. natural selection
 - D. asexual reproduction
26. ***Adaptation*** is best defined as the ...
- A. stages of development throughout an organism's normal growth and life cycle
 - B. differences and/or variations found among a group of organisms living within the same habitat
 - C. arrangement of organisms in various groups or classes and identified by their structural differences
 - D. features that increase an organism's chances of surviving and reproducing in a particular environment