

1. Breeding cats to produce only white ones is an example of
- A.modification selection
 - B.breed selection**
 - C.natural selection
 - D.artificial selection
2. The gene combination of two dominant genes or two recessive genes is
- A.phenotype
 - B.genotype
 - C.heterozygous
 - D.homozygous**
3. The carbon reservoir most affected as a direct result of human activity is the
- A.deep ocean
 - B.vegetation
 - C.atmosphere**
 - D.photosynthesis
4. Random change in allele frequency caused by a series of chance occurrences that cause an allele to become more or less common in a population is
- A.genetic diversity
 - B.genetic marker
 - C.genetic drift**
 - D.genetic code
5. That all species, living or not, were derived from a common ancestor linked by a single tree of life is
- A.adaptation
 - B.evolution
 - C.common descent**
 - D.natural selection
6. Which is the sequence of the transfer of information in most organisms?
- A.protein to DNA to RNA
 - B.RNA to DNA to protein
 - C.DNA to RNA to protein**
 - D.RNA to protein to DNA
7. Air currents, temperature, moisture, light, and soil are all nonliving parts which affect an organism's environment and are called
- A.abiotic factors**
 - B.a niche
 - C.living things
 - D.an ecosystem
8. There is a population of beetles found in a specific deciduous forest. A few of these beetles end up in a different deciduous forest and are able to reproduce. This causes the frequencies of alleles to change. A situation like this, when allele frequencies change due to the migration of a small sub group of a population, is the
- A.butterfly effect
 - B.founder effect**
 - C.ripple effect
 - D.Weinberg effect
9. Antibiotics are effective medications for
- A.fungi
 - B.viral infections
 - C.bacterial infections**
 - D.protozoa
10. A species that enters an environment where it has not lived before is a(n)
- A.endangered species
 - B.invasive species**
 - C.predator
 - D.threatened species
11. In this type of symbiosis, both organisms benefit from the relationship.
- A.commensalism
 - B.mutualism**
 - C.parasitism
 - D.scavenging

12. Which of the following statements is TRUE of parasitism?

A. One organism benefits, and the other is unaffected.

B. One organism benefits, and the other is harmed.

C. One organism benefits, and the other benefits more.

D. Both organisms are harmed.

13. A group of interacting individuals of the same species that occupy a specific area at the same time is a(n).....

A. species

B. population

C. community

D. ecosystem

14. A characteristic that can help an organism survive and reproduce in its habitat is a(n)

A. variation

B. specification

C. mutation

D. adaptation

15. Cell walls can be found in

A. plants

B. fungi

C. bacteria

D. all of the above

16. Which chemical equation correctly represents photosynthesis?

A. $H_2O + CO_2 + \text{sunlight} \rightarrow O_2 + \text{glucose}$

B. $H_2O + O_2 + \text{sunlight} \rightarrow CO_2 + \text{glucose}$

C. $O_2 + \text{glucose} \rightarrow H_2O + CO_2 + \text{energy}$

D. $CO_2 + \text{glucose} \rightarrow H_2O + O_2 + \text{energy}$

17. Diffusion and osmosis are both forms of.....

A. photosynthesis

B. active transport

C. respiration

D. passive transport

18. The passing of traits from parent to offspring is

A. genetics.

B. heredity.

C. traits.

D. Punnett squares.

19. Body parts with different mature forms that developed from the same embryonic tissue are

A. homologous structures

B. fossilization

C. vestigial organs

D. analogous structures

20. Which is a function of the plasma membrane?

A. breaks down lipids, carbohydrates, and proteins from foods

B. stores water, salt, proteins, and carbohydrates

C. keeps the cell wall in place

D. regulates which materials enter and leave the cell

21. The basis for genetic functions is called

Answer: DNA

22. What is the female cell of reproduction?

Answer: Ovum

23. The amount of biomass produced in a given area during a given amount of time is

Answer: Primary

24. Cocci that appear in clusters or groups.....

Answer: Diplococci

25. What is the first stage of mitosis?

Answer: Prophase

