

Genetics in the Natural World

Genetics · Practice Test · 18 Questions

1. What is the name of the molecule that carries genetic information in all living organisms?

- A) DNA
- B) Protein
- C) Sugar
- D) Lipid

2. What are the units of heredity that parents pass to their offspring?

- A) Cells
- B) Genes
- C) Fossils
- D) Rocks

3. Which term describes the physical appearance of an animal resulting from its genetics?

- A) Mutation
- B) Phenotype
- C) Habitat
- D) Migration

4. In sexually reproducing animals, how many parents provide genetic material to the offspring?

- A) One
- B) Two
- C) Three
- D) Four

5. What is the process by which traits are passed from parents to their young?

- A) Heredity
- B) Photosynthesis
- C) Pollination
- D) Evaporation

6. What structure inside a cell contains the DNA in plants and animals?

- A) Nucleus
- B) Leaf
- C) Root
- D) Stem

7. Which of these is an example of an inherited trait in a dog?

- A) A scar on its ear
- B) Fur color
- C) A learned trick
- D) A collar

8. What is a permanent change in the DNA sequence of an organism called?

- A) Adaptation
- B) Mutation
- C) Metamorphosis
- D) Hibernation

9. What do we call the specific version of a gene?

- A) Allele
- B) Organ
- C) Soil
- D) Water

10. Which animal species is frequently used in genetic research due to its simple genome?

- A) Fruit fly
- B) Blue whale
- C) Giraffe
- D) Elephant

11. What determines the sex of many types of reptiles, such as crocodiles, during development?

- A) Incubation temperature
- B) Diet of the mother
- C) Color of the eggs
- D) Size of the nest

12. What is the term for the complete set of genetic instructions in an organism?

- A) Genome
- B) Syllabus
- C) Catalog
- D) Recipe

13. If an organism has two identical alleles for a specific trait, it is called:

- A) Homozygous
- B) Heterozygous
- C) Complex
- D) Adaptive

14. Which substance provides the 'code' for building proteins in animals?

- A) DNA
- B) Water
- C) Sunlight
- D) Oxygen

15. What is the primary function of DNA in nature?

- A) Storing genetic instructions
- B) Providing energy to cells
- C) Filtering water
- D) Protecting skin from sun

16. Which of the following is NOT an inherited trait in birds?

- A) Beak shape
- B) Ability to sing a specific song learned from adults
- C) Feather color
- D) Presence of wings

17. What is the process of selecting animals with desirable traits for breeding called?

- A) Artificial selection
- B) Natural disaster
- C) Extinction
- D) Conservation

18. Where is the majority of a grizzly bear's genetic information located?

- A) In the nucleus of its cells
- B) In its fur
- C) In its claws
- D) In its teeth