



# Biology

Test Pack

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**BIOLOGY • PRETEST**

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Circle the letter of the correct answer to each of the following questions.

1. What are lipids?
  - a. sugars and starches
  - b. the molecules that make up fats and oils
  - c. proteins that are involved in chemical reactions in organisms
  - d. the basic units of proteins

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2. What is the largest, most visible structure in most cells?
  - a. the Golgi complex
  - b. the lysosomes
  - c. the mitochondria
  - d. the nucleus

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3. How many pairs of chromosomes are found in the human cell?
  - a. 7
  - b. 19
  - c. 23
  - d. 27

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4. In peas, green pea pods are dominant over yellow ones. If you cross a green homozygous variety with a yellow variety, what will the  $F_2$  generation look like?
  - a. all green
  - b. all yellow
  - c. half green and half yellow
  - d. three quarters green and one quarter yellow

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5. What is the most important characteristic of a species?
  - a. Individuals must be able to interbreed and produce fertile offspring.
  - b. Individuals must belong to the same population.
  - c. Individuals must possess the same genotype.
  - d. Individuals must possess the same phenotype.

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**UNIT 2 TEST • SIMPLE ORGANISMS**

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Circle the letter of the correct answer to each of the following questions.

1. What were probably the earliest life forms on Earth?

- a. algae
  - b. bacteria
  - c. diatoms
  - d. viruses
- 

2. What is the name for cells that do not have a nucleus?

- a. prokaryotic
  - b. nuclear
  - c. eukaryotic
  - d. bacterial
- 

3. How do most bacteria reproduce?

- a. by spores
  - b. by seeds
  - c. by diffusion
  - d. by binary fission
- 

4. Which of the following are the three most common eubacteria shapes?

- a. spiral, circle, and sphere
  - b. spiral, rod, and sphere
  - c. rod, rectangle, and circle
  - d. sphere, spiral, and rectangle
- 

5. Which of the following diseases is caused by bacteria?

- a. measles
- b. influenza
- c. botulism
- d. strep throat

- 
6. What is an algal bloom?
- the flowering of certain water plants when exposed to algae
  - the flowering tip of multicellular algae
  - a rapid growth of algae
  - a type of algae that lives on flowering water plants
- 
7. What is red tide?
- an algal bloom of certain dinoflagellates that contain a red pigment
  - an algal bloom of diatoms that contain a red pigment
  - a kind of red algae that lives in snow
  - a kind of red seaweed
- 
8. What is the name for a protozoan that attaches itself to another organism and uses the host organism for food?
- ciliate
  - dinoflagellate
  - parasite
  - pseudopod
- 
9. What type of algae are commonly known as seaweed?
- blue-green algae
  - brown algae
  - green algae
  - red algae
- 
10. What is the name for the foot-like extension of cytoplasm some protozoans use to move?
- flagellum
  - cilium
  - pseudopod
  - fingers

- 
11. What makes single-celled protists different from bacteria?
- They have DNA.
  - They have a nucleus.
  - They have cell walls.
  - They have flagella.
- 
12. What do paramecia use to move?
- flagella
  - pseudopods
  - cilia
  - fingers
- 
13. What is a community of slime molds called?
- colony
  - plasmodium
  - sporangia
  - algae
- 
14. What is the basic structure in a fungus called?
- hypha
  - mycelium
  - spore
  - yeast
- 
15. What type of growth is actually an association between a fungus and algae?
- ameba
  - lichen
  - mycelium
  - mushroom

16. How do fungi reproduce?

- a. through seeds
  - b. through budding off
  - c. through spores
  - d. through eggs
- 

17. What is one important role fungi play in the ecosystem?

- a. decomposers
  - b. producers
  - c. first-order consumers
  - d. scavengers
- 

18. What do fungi release into the organism they feed on in order to digest it?

- a. an acid
  - b. an alkaline
  - c. an enzyme
  - d. a nutrient
- 

19. Which of the following human conditions is caused by a fungus?

- a. polio
  - b. athlete's foot
  - c. malaria
  - d. strep throat
- 

20. Which of the following organisms is a fungus?

- a. ameba
- b. bacterium
- c. mushroom
- d. alga

**BIOLOGY • POSTTEST**

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Circle the letter of the correct answer to each of the following questions.

1. What are enzymes?
  - a. sugars and starches
  - b. the molecules that make up fats and oils
  - c. proteins that are involved in chemical reactions in organisms
  - d. the basic units of proteins

---
2. Which of the following is true about the nucleus?
  - a. It starts and controls cell division.
  - b. It is surrounded by the nucleolus.
  - c. It processes glucose.
  - d. It is the site of protein synthesis.

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3. What is the term for a region of DNA that codes for a single protein or group of proteins?
  - a. a gene
  - b. a nitrogen base
  - c. a nucleotide
  - d. RNA

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4. What is the term for traits that are governed by more than one gene?
  - a. codominant traits
  - b. dominant traits
  - c. polygenic traits
  - d. recessive traits

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5. Which of the following situations will likely lead to speciation?
  - a. Individuals from one population breed with individuals from a second population.
  - b. Two populations occupy the same habitat type.
  - c. Two populations are physically separated from each other.
  - d. Members of the same population develop different color patterns.