

 **POWER BASICS⁺ PLUS**

Biology

Test Pack

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BIOLOGY • PRETEST

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

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

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

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 F₂ generation look like?
 - a. all green
 - b. all yellow
 - c. half green and half yellow
 - d. three quarters green and one quarter yellow

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.

UNIT 2 TEST • SIMPLE ORGANISMS

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

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.

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

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

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.