

Biology in the 21st Century

WU: Diagnostic Test

Choose the letter of the best answer.

- _____ 1. When we eat, we take in energy that came originally from
 - a. sunlight.
 - b. water.
 - c. oxygen.
 - d. bacteria.

- _____ 2. Which statement about living things is supported by Figure 1.1?

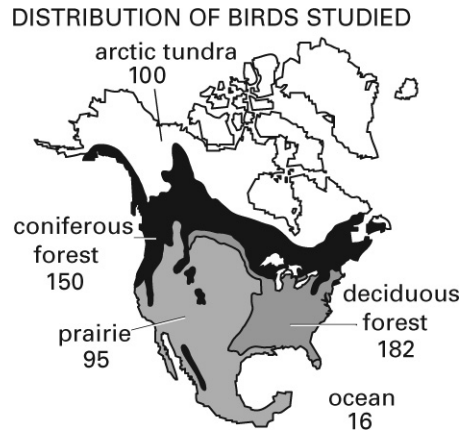


FIG. 1.1

- a. They are found within close range of water.
 - b. They are found only in restricted areas.
 - c. They are found in a great variety of environments.
 - d. They are found where climate conditions are steady.
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- _____ 3. In what types of living things must groups of cells work together?
 - a. viruses
 - b. unicellular life
 - c. multicellular life
 - d. bacteria

 - _____ 4. Cells make up all living things. They can be seen only if they are
 - a. moving.
 - b. flat.
 - c. dyed.
 - d. magnified.

 - _____ 5. The structure of a human skin cell differs from that of a human muscle cell. The two cells most likely have different
 - a. ways of dividing.
 - b. genes.
 - c. functions.
 - d. life processes.

Diagnostic Test *continued*

_____ 6. The data shown in Figure 1.2 might support which of these hypotheses?

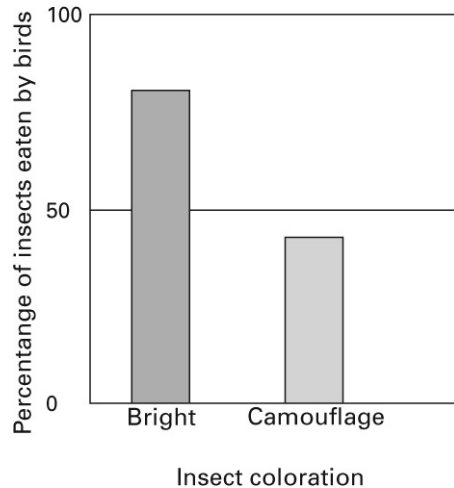


FIG. 1.2

- a. Brightly colored insects are harder for birds to catch.
 - b. Insects can hide to avoid bird predators.
 - c. Birds choose insects to eat based on their size.
 - d. Camouflage protects insects from being eaten.
- _____ 7. If you repeat an experiment and the results are very different from the results you got the first time, the next step would be to
- a. repeat the experiment again.
 - b. try a different experiment.
 - c. trust the second results.
 - d. decide which results are better.
- _____ 8. Which of the following would you need in order to compare the effect of two different fertilizers on plant growth?
- a. a cardboard box to cover one plant
 - b. a way to measure plant growth
 - c. a selection of soil types
 - d. a variety of plant species
- _____ 9. Science is a form of inquiry because scientists trying to understand the world around them start by
- a. collecting data.
 - b. asking questions.
 - c. forming conclusions.
 - d. designing experiments.
- _____ 10. Which of the following have biologists most likely studied for hundreds of years?
- a. determining the location of new planets
 - b. isolating atmospheric pollutants
 - c. breeding successful crop plants
 - d. describing movements of ocean currents