

Life Science Tests

Note to parent:

These tests are purposely designed to be in-depth knowledge assessment tools. As such, they are fairly long, so please do not be intimidated! Essay or short answer-type questions are the best way to identify whether or not your student completely understands the material. It is perfectly acceptable, if you choose, to have your student answer only the even questions, only the odd questions, or every third question as you see fit for your student's need. If they are able to correctly answer the majority of questions asked, it is likely they understand all of the material very well. If your student answers questions better orally, please ask them that way, rather than having them write it out. The method of test taking should not be a stumbling block in your student's performance.

LIFE SCIENCE TEST #1 (Chapters 1-3)

1. What do biologists study?
2. What is the process of the scientific method?
3. True or false? The experimental group is exposed to the variable in a controlled experiment.
4. What is the difference between a measured and a derived unit?
5. List at least five ways data can be obtained during an experiment.

6. True or False? In order to study life, one must know what is alive and what is not.
7. True or false? A multicellular organism is made up of two or more cells.
8. True or false? Unicellular organisms are not alive because they only contain one cell.
9. Why is DNA called the "blueprint of life?"
10. What is the difference between sexual and asexual reproduction?
11. True or false? Even unicellular organisms are complex and organized.
12. Do multicellular organisms have a higher degree of complexity than single cell organisms?
13. What are the structures called that allow an organism to sense and respond to their environment?
14. True or false? Plants convert the sun's energy through the process of cellular respiration.
15. True or false? Plants extract the energy they need from their environment, but animals do not.
16. When a fish that is cold swims into warmer water to warm up, then later swims to cooler water to cool down, what property of life is the fish displaying?
17. What is a binomial name?

18. What is an aerobic organism?
19. True or false? Air is made up mainly of nitrogen, oxygen, carbon dioxide, and argon.
20. Why are matter, mass, and weight not the same thing?
21. What is one way that you can prove something you cannot see, such as a gas, contains matter?
22. True or false? A molecule is matter composed of only one type of atom.
23. What is an organic molecule?
24. What are the four types of organic molecules?
25. What three atoms compose all carbohydrate molecules?
26. True or false? Glucose is an example of a complex carbohydrate.
27. True or false? Lipids are usually solid at room temperature, while fats are usually liquid.
28. How are proteins made?

29. True or false? Proteins are not sensitive to changes in their amino acids, so the amino acids can be changed in a protein without much effect, if any, to the organism or the way the protein works.
30. Why is it said that the sun is the ultimate source of all biological energy on earth?
31. True or false? Plants use the energy they reflect for photosynthesis.
32. True or false? Objects appear the color they are because of the light they reflect.