

Organization Study Questions

Dr. J. Lim

1. Biology is the study of _____.
2. Anatomy is the study of _____ and the relationships among them.
3. Physiology is the study of the _____ of the body.
4. List the five characteristics of life.

5. List the levels of organization starting from simplest to most complex.

6. A population consists of a group of _____ of the same species occupying a given area.
7. List the five steps to the scientific method.

8. What is the difference between a prediction and a hypothesis?

9. Which of the principal body systems is not necessary for healthy living? _____
10. Sweat glands are a part of which body system? _____
11. Name the body system that contains the cells that produce blood cells. _____
12. The nervous system regulates body functions _____ employing nerve impulses.
13. An important function of this body system is the transportation of nutrients and waste to and from body cells. _____
14. This body system returns protein and plasma to the circulatory system. _____
15. Proper blood composition is maintained by the kidneys of the _____ system.
16. BIG → small characterizes the action of the _____ system.
17. Define homeostasis _____
18. State an example of homeostasis in action. _____
19. Describe the action of the control center in a feedback system.

20. A _____ feedback system requires frequent monitoring and adjustments.
21. Your eyebrows are _____ to your chin.
22. Your chin is _____ to vertebrae in your neck.
23. Your neck vertebrae are _____ to your throat.
24. Your nose is _____ to your ears.
25. Your skin is _____ to your skeleton.
26. Your fingernails are _____ to your elbow.
27. A _____ section divides a specimen into equal left and right parts.
28. You cut a banana to create two sections of equal length. What type of plane applies to this real world slice? _____
29. A frontal section divides a specimen into _____ and _____ parts.
30. Name something that resides in the abdominopelvic cavity. _____
31. State the two parts of the dorsal body cavity and name a structure in each.

Organization Study Questions KEY

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1. Biology is the study of **life**.
2. Anatomy is the study of **structures** and the relationships among them.
3. Physiology is the study of the **functions** of the body.
4. List the five characteristics of life.
Eats for energy, senses and responds to environmental changes, reproduces and grows, consists of one or more cells, possesses homeostatic mechanisms
5. List the levels of organization starting from simplest to most complex.
Chemical, cell, tissue, organ, system, organism, populations, communities, ecosystems, biosphere
6. A population consists of a group of **organisms** of the same species occupying a given area.
7. List the five steps to the scientific method.
Observation, hypothesis, prediction, experimentation, conclusion
8. What is the difference between a prediction and a hypothesis?
Prediction is an "if-then" process whereas a hypothesis is an educated guess
9. Which of the principal body systems is not necessary for healthy living? **Reproductive**
10. Sweat glands are a part of which body system? **Integumentary**
11. Name the body system that contains the cells that produce blood cells. **Skeletal**
12. The nervous system regulates body functions **rapidly** employing nerve impulses.
13. An important function of this body system is the transportation of nutrients and waste to and from body cells. **Cardiovascular**
14. This body system returns protein and plasma to the circulatory system. **Lymphatic**
15. Proper blood composition is maintained by the kidneys of the **urinary** system.
16. BIG → small characterizes the action of the **digestive** system.
17. Define homeostasis **A state of balance in which the body's internal environment remains within certain physiological limits**
18. State an example of homeostasis in action. **Body temp, hydration, BP, heart rate, etc**
19. Describe the action of the control center in a feedback system. **Sets a balance point, processes input from receptors, determines response**
20. A **negative** feedback system requires frequent monitoring and adjustments.
21. Your eyebrows are **superior** to your chin.
22. Your chin is **anterior/ventral** to vertebrae in your neck.
23. Your neck vertebrae are **posterior/dorsal** to your throat.
24. Your nose is **medial & anterior** to your ears.
25. Your skin is **superficial** to your skeleton.
26. Your fingernails are **distal** to your elbow.
27. A **median/midsagittal** section divides a specimen into equal left and right parts.
28. You cut a banana to create two sections of equal length. What type of plane applies to this real world slice? **Cross/transverse**
29. A frontal section divides a specimen into **front** and **back** parts.
30. Name something that resides in the abdominopelvic cavity. **Stomach, reprod & urinary structures, etc**
31. State the two parts of the dorsal body cavity and name a structure in each. **Cranial – brain; vertebral - spine**