

Lecture 2- study questions

Organization Levels:

1. Cells organize into _____.
2. What makes up organs?
3. Organs working together become a _____, and these working together make the entire _____.
4. From simplest to most complex, list the levels of living organism.

Chemistry of life (1st Part):

1. Name 2 properties of all matter.
2. What are elements?
3. Name the 4 elements that make up most of a living thing.
4. What are the 2 main regions of an atom?
5. Where is the nucleus of an atom found and what does it contain?
6. What is the charge on a proton? A neutron?
7. All atoms of the same element have the _____ number of protons.
8. The number of protons in an atom determines the _____.
9. What is the charge on an electron?
10. Do all the atoms of the same element have the same number of neutrons?
11. Atoms of the same element with different numbers of neutrons are called _____.
12. The number of protons PLUS neutrons in an atom determines its _____.
13. Where are electrons found?
14. Which electrons in an atom have the most energy?
15. Two or more elements combined together make a _____.
16. The outermost _____ in elements determine if they will combine.
17. Elements with _____ outer energy levels are stable & won't react.
18. Why do elements tend to react with other elements?
19. Chemical _____ represent chemical reactions.
20. How do covalent bonds form?
21. How do ions form?
22. Positive ions _____ electrons, while negative ions _____ electrons.
23. Differentiate ionic bonding with hydrogen bonding
24. Define polarity, ionization. Discuss with examples
25. What is hydrogen bonding? What is its importance? Discuss with example.