

Name _____ Period _____ Date _____

Practice Cell Chemistry Test True/False *Indicate whether the sentence or statement is true or false.*

- _____ 1. Protein is a macromolecule.
- _____ 2. The amount of energy needed to cause a chemical reaction to start is called activation energy.
- _____ 3. When an enzyme binds with its substrate, the activation energy needed for the chemical reaction to occur is raised.
- _____ 4. The types of particles that are located in the nucleus of an atom are protons and neutrons, and the types of particles that are surrounding the nucleus are electrons.
- _____ 5. The products of an endergonic chemical reaction possess more energy than the reactants from which they are produced.
- _____ 6. Enzymes speed up a chemical reaction by increasing the activation energy of the reaction.
- _____ 7. Organic compounds are substances that contain carbon and are produced and found in living things.
- _____ 8. The monomer for a carbohydrate is an amino acid.
- _____ 9. The substrate binds at the active site of the enzyme.
- _____ 10. The pH range for acids is from 8-14.
- _____ 11. Enzymes are not consumed or damaged in chemical reactions, but can be used over and over.
- _____ 12. A cell contains only one or two enzymes.
- _____ 13. Water is an organic molecule.
- _____ 14. All matter is composed of cells.
- _____ 15. In a reaction products bind with the active site of an enzyme and substrates are produced.
- _____ 16. Lipids are soluble in water or salt water.
- _____ 17. Enzymes or catalysts are affected by only temperature.
- _____ 18. In an exergonic reaction, energy is released into the surroundings.
- _____ 19. In an endergonic reaction, the products have more energy than the reactants.
- _____ 20. Nucleotides are made of only a sugar and a nitrogen base.
- _____ 21. Lipids are macromolecules that function as enzymes.
- _____ 22. A neutral pH is less than 7.
- _____ 23. Saliva contains salt which works as an enzyme to break down starch.
- _____ 24. A monosaccharide or simple sugar is a monomer of carbohydrates.
- _____ 25. DNA and RNA are examples of nucleic acids.
- _____ 26. Fats and oils are examples of carbohydrates.
- _____ 27. Lipids are made of fatty acids held together by a nitrogen backbone.
- _____ 28. Glycogen is a carbohydrate that stores energy in animals.
- _____ 29. The primary functions of lipids are to store energy and provide structural support such as the cell membrane.
- _____ 30. Most organic compounds contain only hydrogen and oxygen.
- _____ 31. A polymer can also be called a macromolecule.
- _____ 32. A polymer is made of a single monomer.
- _____ 33. Nucleic acids are held together by peptide bonds.
- _____ 34. Nucleic acids are used to supply energy for the cell.
- _____ 35. Only a high pH (greater than 9) affects the effectiveness of an enzyme.

**Practice Cell Chemistry Test
Answer Section**

TRUE/FALSE

1. ANS: T
2. ANS: T
3. ANS: F
4. ANS: T
5. ANS: T
6. ANS: F
7. ANS: T
8. ANS: F
9. ANS: T
10. ANS: F
11. ANS: T
12. ANS: F
13. ANS: F
14. ANS: F
15. ANS: F
16. ANS: F
17. ANS: F
18. ANS: T
19. ANS: T
20. ANS: F
21. ANS: F
22. ANS: F
23. ANS: F
24. ANS: T
25. ANS: T
26. ANS: F
27. ANS: F
28. ANS: T
29. ANS: T
30. ANS: F
31. ANS: T
32. ANS: F
33. ANS: F
34. ANS: F

35. ANS: F