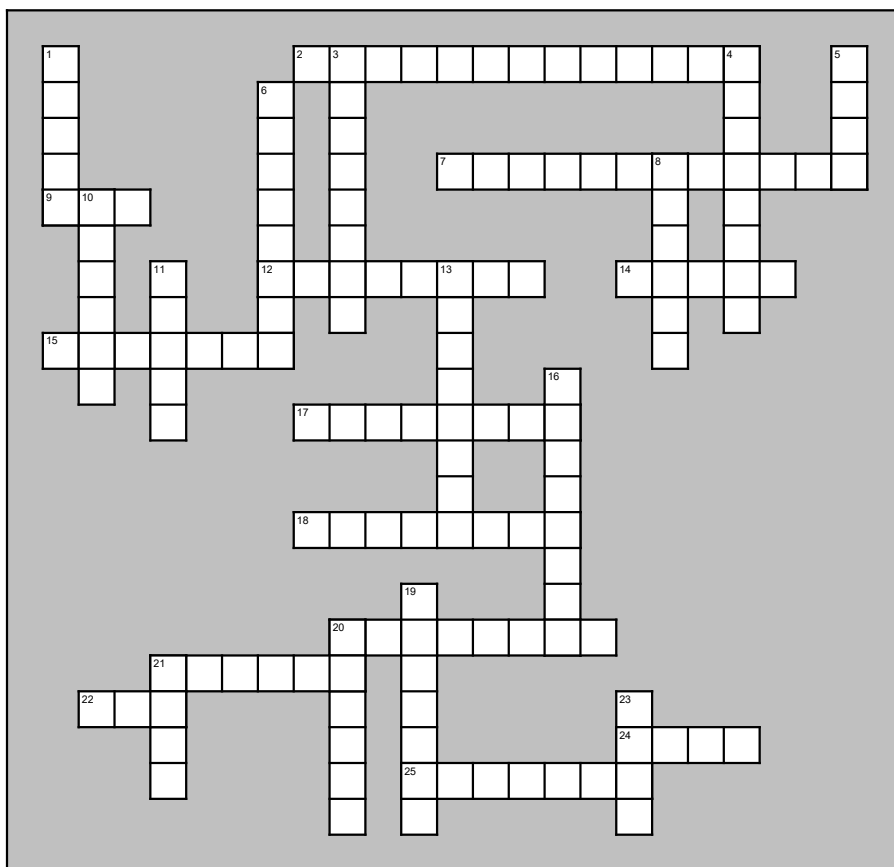


Crossword



Across

2. Carbon, hydrogen and Oxygen are found in a 1:2:1 ratio. The simplest of these are sugars such as glucose (monomer). Disaccharides, polysaccharides (polymers) provide energy.
7. Determine hereditary information of cells and living organisms. Controls all cellular activity. DNA and RNA. Nitrogenous base, sugar, phosphate group.
9. Cytosine, adenine, uracil and guanine are its nitrogenous bases. Involved in translation and transcription based on protein synthesis. Single stranded.
12. Elements which have a differing number of neutrons in their nucleus. Therefore, they differ in atomic mass, but not in atomic number.
14. Type of bond in which two oppositely charged particles chemically combine. Conduct electricity.
15. Particles found in the nucleus of atoms, having a mass of 1 amu. They have no charge.
17. A change in which a new substance is produced from the reaction.
18. Type of bond in which electrons are shared by two atoms. Macromolecules possess these bonds.
20. Made up of amino acid monomers. Polypeptide polymers. Comprise most of the visible organs, tissues and parts of living organisms. Primary, secondary, tertiary, quaternary structures.
21. Weak acids or bases that neutralize reactions to maintain a stable pH.
22. Cytosine, adenine, thymine, and guanine are its nitrogenous bases. Makes up genes. Double stranded.
24. Solutions that have high H⁺ concentrations. pH below 7. Citrus.
25. A substance that cannot be broken down into simpler substances by ordinary chemical means. Each element retains its own properties.

Down

1. Water is a ___ molecule having a relatively positive end (near oxygen) and a relatively negative end (near the hydrogens).
3. Water is attracted to other substances. Combined with cohesion it gives water a high surface tension.
4. Water has a high ___ heat. It takes a lot of energy to heat water up and water loses heat very slowly compared to metals.
5. The atomic ___, representing how many protons and neutrons are in an atom's nucleus. Written as a superscript in the nuclear symbol.
6. Water is attracted to itself.
8. First letter of the six most abundant elements in living organisms.
10. The atomic ___ is also called the Z ___, representing how many protons or electrons are in an atom. Written as a subscript in the nuclear symbol.
11. Involved in dehydration synthesis and hydrolysis. Special properties (temperature moderation, solid floats).
13. A change in the state (gas, liquid, solid) or structure of a substance without affecting its chemical composition.
16. 1/1837 the mass of a proton. Negatively charged particle that orbits the nucleus of atoms.
19. Complex carbohydrates, lipids, proteins, nucleic acids are these build from dehydration synthesis of monomers.
20. Positively charged particles found in the nucleus of atoms, having a mass of 1 amu.
21. Solutions that have high OH⁻ concentrations. pH above 7. Chocolate. Drano.
23. Fatty acid group and glycerol group monomers. These biochemical molecules store energy, insulate and give cushion. Lipids.