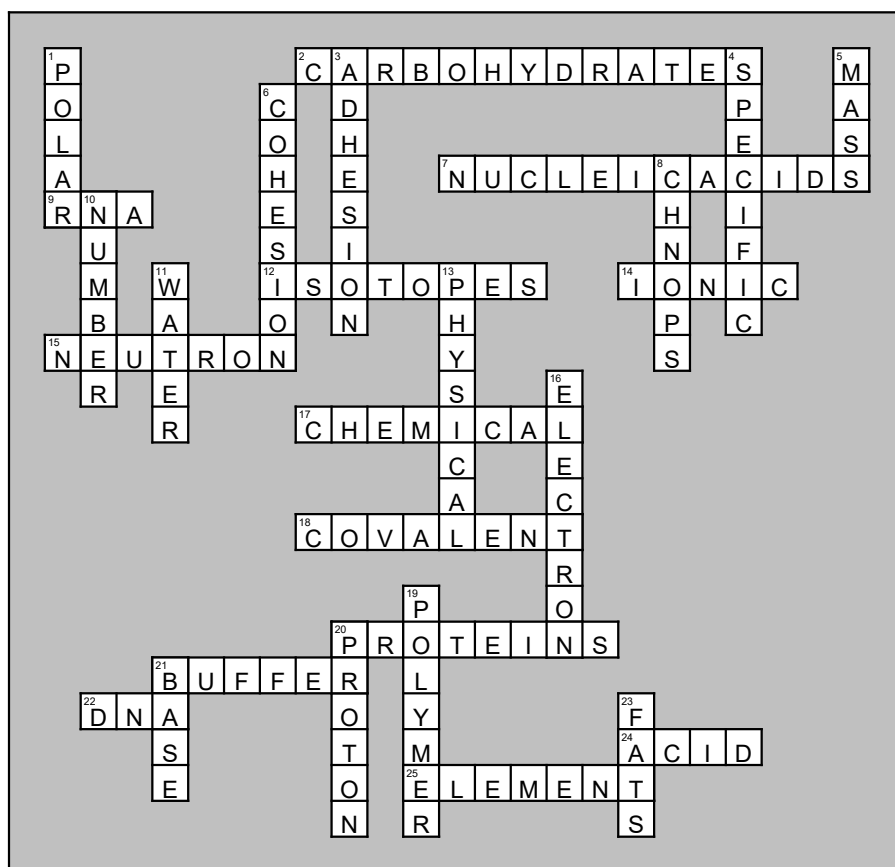


# Crossword



## Across

- 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.
- Determine hereditary information of cells and living organisms. Controls all cellular activity. DNA and RNA. Nitrogenous base, sugar, phosphate group.
- Cytosine, adenine, uracil and guanine are its nitrogenous bases. Involved in translation and transcription based on protein synthesis. Single stranded.
- Elements which have a differing number of neutrons in their nucleus. Therefore, they differ in atomic mass, but not in atomic number.
- Type of bond in which two oppositely charged particles chemically combine. Conduct electricity.
- Particles found in the nucleus of atoms, having a mass of 1 amu. They have no charge.
- A change in which a new substance is produced from the reaction.
- Type of bond in which electrons are shared by two atoms. Macromolecules possess these bonds.
- 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.
- Weak acids or bases that neutralize reactions to maintain a stable pH.
- Cytosine, adenine, thymine, and guanine are its nitrogenous bases. Makes up genes. Double stranded.
- Solutions that have high H<sup>+</sup> concentrations. pH below 7. Citrus.
- A substance that cannot be broken down into simpler substances by ordinary chemical means. Each element retains its own properties.

## Down

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