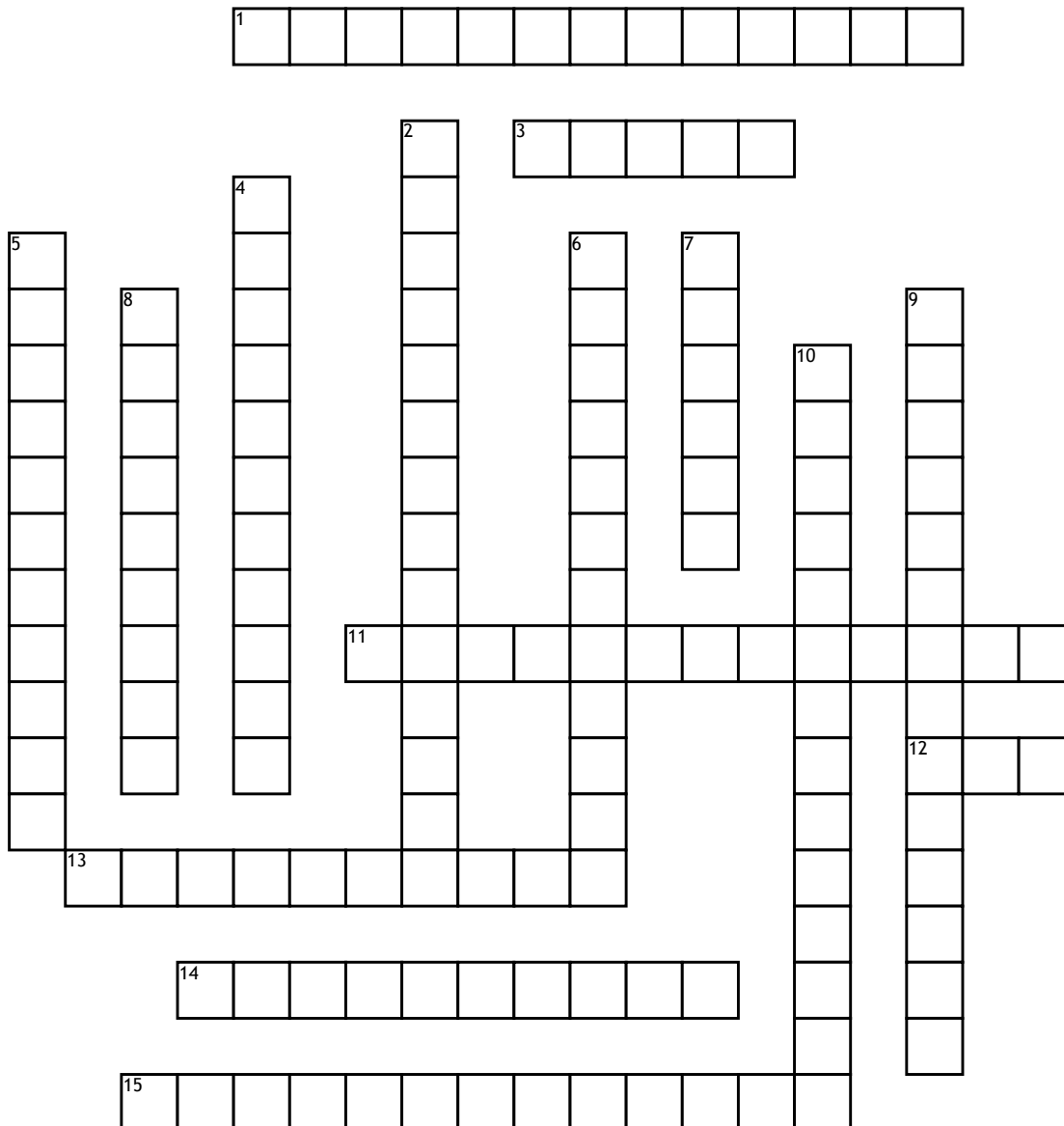


DNA



Across

1. a weak bond between two molecules resulting from an electrostatic attraction between a proton in one molecule and an electronegative atom in the other.
3. unit of heredity that is transferred from a parent to offspring and is held to determine some characteristic of the offspring.
11. Austro-Hungarian biochemist who immigrated to the United States during the Nazi era and was a professor of biochemistry at Columbia University medical school.
12. Deoxyribonucleic acid is a molecule that carries the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms and many viruses.

13. a threadlike structure of nucleic acids and protein found in the nucleus of most living cells, carrying genetic information in the form of genes.
14. One of the three diazines, it has the nitrogen atoms at positions 1 and 3 in the ring.
15. replication is a conserved mechanism that restricts DNA replication to only once per cell cycle.

Down

2. DNA from any cell of all organisms should have a 1:1 ratio (base Pair Rule) of pyrimidine and purine bases and, more specifically, that the amount of guanine is equal to cytosine and the amount of adenine is equal to thymine.
4. form the basic structural unit of nucleic acids such as DNA.

5. the structure formed by double-stranded molecules of nucleic acids such as DNA.
6. a nitrogen containing molecule that has the same chemical properties as a base.
7. heterocyclic aromatic organic compound that consists of a pyrimidine ring fused to an imidazole ring.
8. the material of which the chromosomes of organisms other than bacteria (i.e., eukaryotes) are composed.
9. create their famous two-strand, or double-helix, model.
10. DNA molecules with protein in structures called chromosomes.