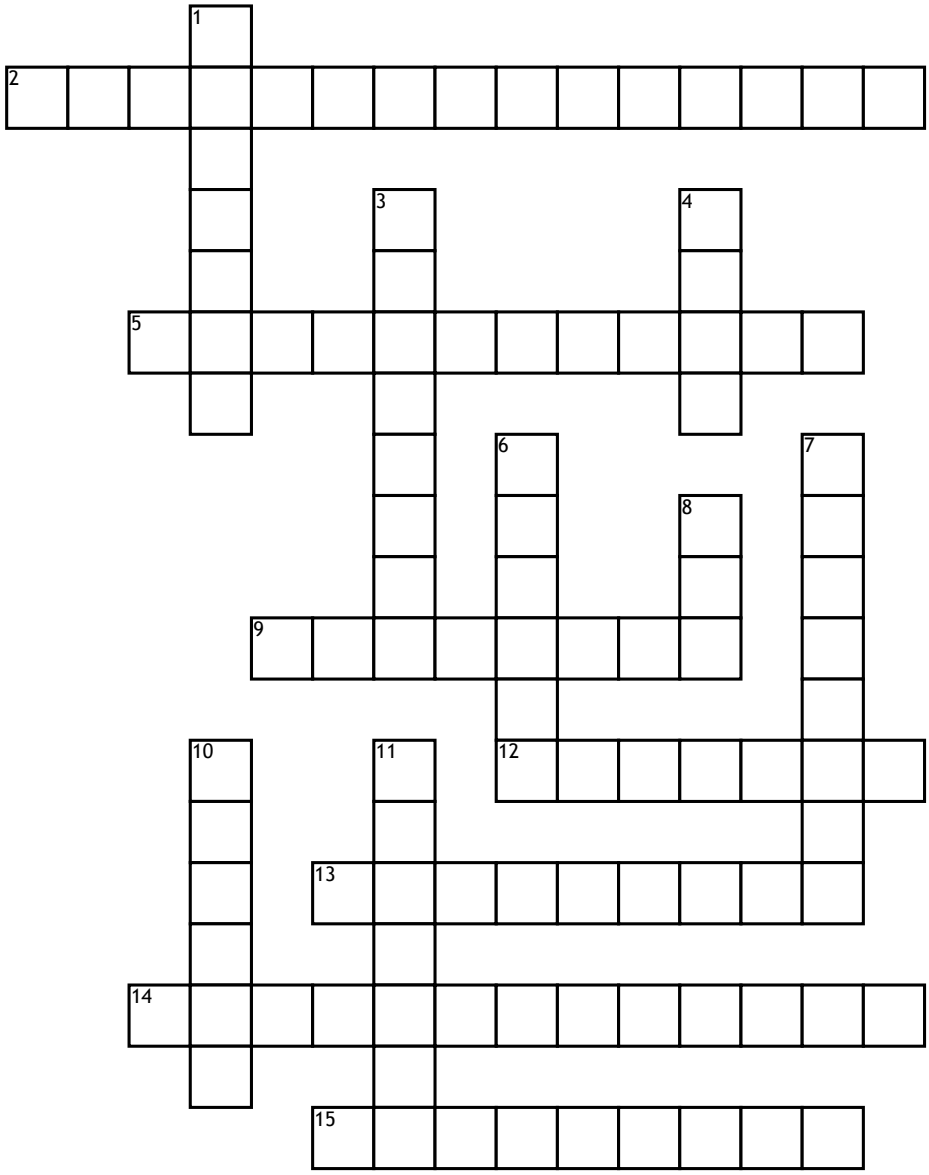
Name: _____ Date: _____ Period: _____

The Chemistry of Life



Across

2. outer shell electron that is associated with an atom, and that can participate in the formation of a chemical bond if the outer shell is not closed; in a single covalent bond, both atoms in the bond contribute one valence electron in order to form a shared pair

5. also called a molecular bond, is a chemical bond that involves the sharing of electron pairs between atoms

9. a stable subatomic particle with a charge of negative electricity, found in all atoms and acting as the primary carrier of electricity in solids

12. the central and most important part of an object, movement, or group, forming the basis for its activity and growth

13. A chemical bond formed between two ions with opposite charges. Ionic bonds form when one atom gives up one or more electrons to another atom IONIC

14. a table of the chemical elements arranged in order of atomic number, usually in rows, so that elements with similar atomic structure (and hence similar chemical properties) appear in vertical columns

15. he was a Russian scientist who made the periodic table

Down

1. a subatomic particle of about the same mass as a proton but without an electric charge, present in all atomic nuclei except those of ordinary hydrogen

3. a group of atoms bonded together, representing the smallest fundamental unit of a chemical compound that can take part in a chemical reaction

4. the basic unit of a chemical element

6. a stable subatomic particle occurring in all atomic nuclei, with a positive electric charge equal in magnitude to that of an electron, but of opposite sign

7. a thing that is composed of two or more separate elements; a mixture

8. an atom or molecule with a net electric charge due to the loss or gain of one or more electrons

10. physical substance in general, as distinct from mind and spirit; (in physics) that which occupies space and possesses rest mass

11. each of two or more forms of the same element that contain equal numbers of protons but different numbers of neutrons in their nuclei