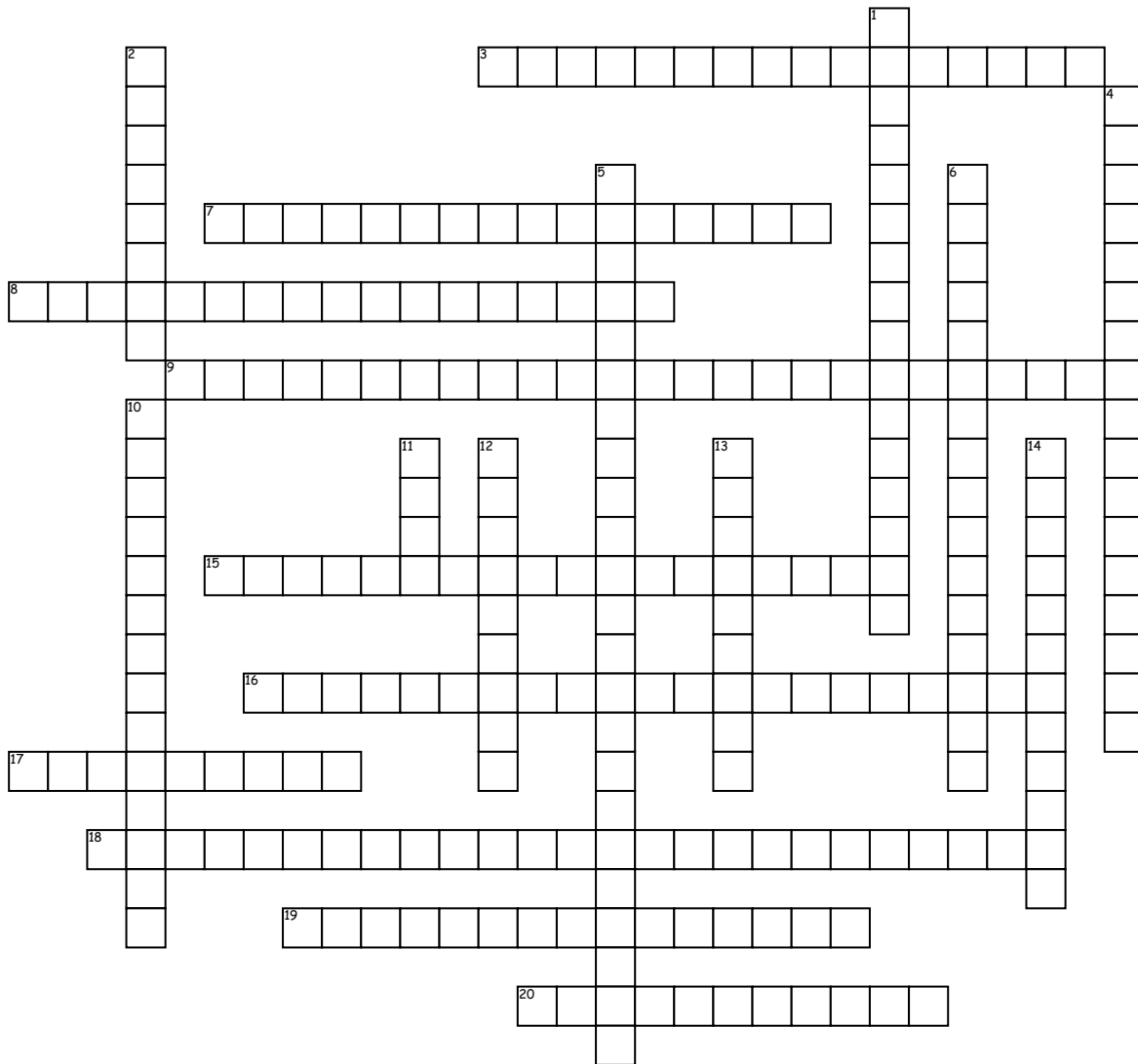


Chemical Bonding



Across

3. The process by which the atoms of one or more substances are rearranged to form different substances; occurrence can be indicated by changes in temperature, color, odor, and physical state.

7. A model that use electron-dot structures to show how electrons are arranged in molecules.

8. A chemical reaction in which two or more substances react to yield a single product.

9. A chemical reaction that involves the exchange of ions between two compounds and produces either a precipitate, a gas, or water.

15. A chemical reaction that occurs when a substance reacts with oxygen releasing energy in the form of light and heat.

16. A chemical reaction that occurs when a single compound breaks down into two or more elements or new compounds.

17. states that atoms lose, gain, or share electrons in order to acquire the stable electron configuration of a noble gas.

18. A chemical reaction that occurs when the atoms of one element replace the atoms of another element in a compound.

19. Determine which substances are soluble, and to what extent.

20. A solid produced during a chemical reaction in a solution.

Down

1. An electron of an atom, located in the outermost shell of the atom that can be transferred to or shared with another atom.

2. A substance formed during a chemical reaction.

4. The relative ability of an element's atoms to attract electrons in a chemical bond.

5. A law stating that atoms are not created or destroyed during a chemical reaction. There is the same amount of matter before and after the reaction, the atoms are just rearranged.

6. A statement using chemical formulas to describe the identities and relative amounts of the reactants and products involved in the chemical reaction.

10. An empirical, calculated, and structurally analytical progression of a series of metals, arranged by their "reactivity" from highest to lowest.

11. A charged product resulting from the gain or loss of electrons.

12. The electrostatic force that holds oppositely charged particles together in an ionic compound.

13. The starting substance in a chemical reaction.

14. A chemical bond that results from the sharing of electrons.