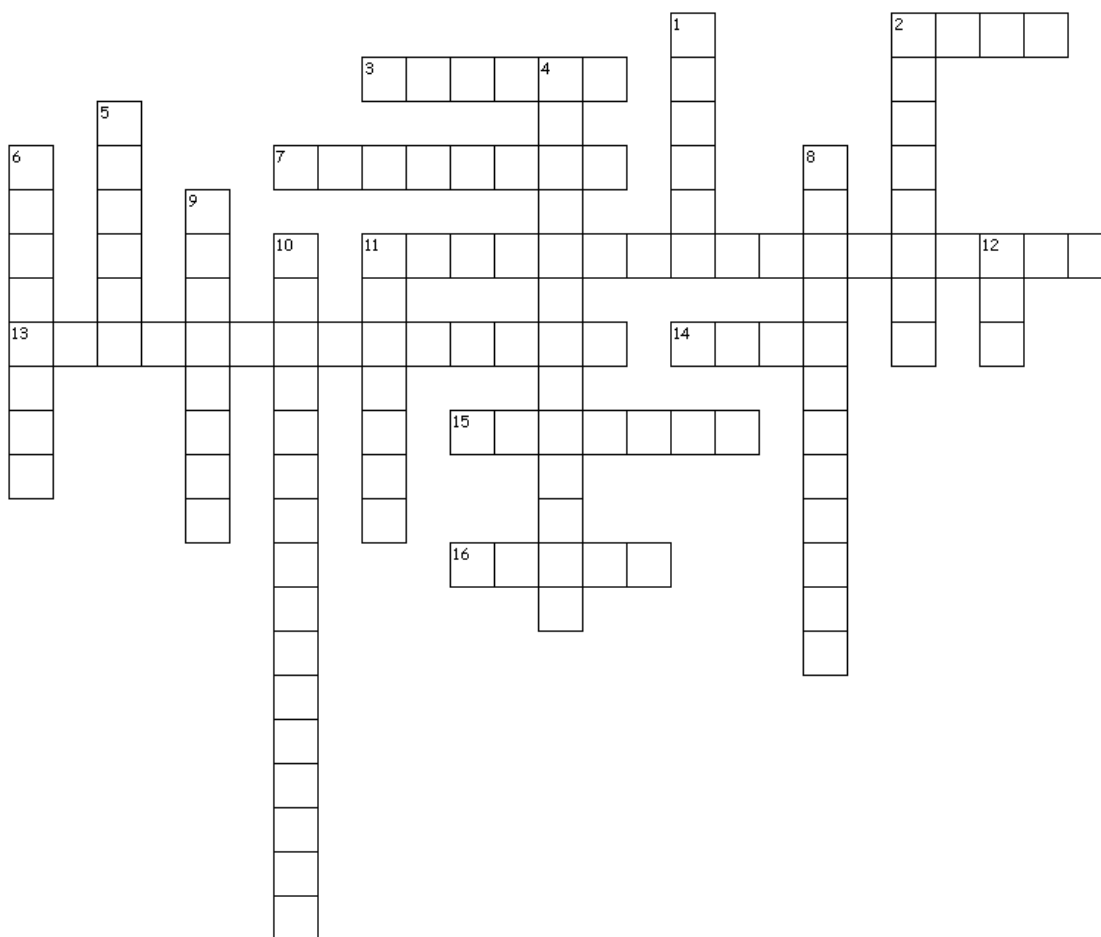


Crossword Puzzle



Across

2. A substance that increases the hydrogen ion concentration in a solution.
3. A substance that consists of acid and base forms in solution and that minimizes changes in pH when extraneous acids or bases are added to the solution.
7. A type of weak chemical bond formed when the slightly positive hydrogen atom of a polar covalent bond in one molecule is attracted to the slightly negative atom of a polar covalent bond in another molecule.
11. The tendency for an atom to pull electrons toward itself.
13. A measure of how difficult it is to stretch or break the surface of a liquid. Water has a high _____ because of the hydrogen bonding of surface molecules.
14. A substance that reduces the hydrogen ion concentration in a solution.
15. A measure of hydrogen ion concentration equal to $-\log [H^+]$ and ranging in value from 0 to 14.
16. A type of covalent bond between atoms that differ in electronegativity. The shared electrons are pulled closer to the more electronegative atom, making it slightly negative and the other atom slightly positive.

Down

1. A subatomic particle with a single positive electrical charge, found in the nucleus of the atom.
2. The tendency of different kinds of molecules to stick together.
4. An energy level at which an electron orbits the nucleus of an atom.
5. Anything that takes up space and has mass.
6. The binding together of like molecules, often by hydrogen bonds.
8. An element indispensable for life but required in extremely minute amounts.
9. A type of strong chemical bond in which two atoms share one pair of electrons in a mutual valence shell.
10. A process leading to chemical changes in matter; involves the making and/or breaking of chemical bonds.
11. Any substance that cannot be broken down to any other substance.
12. An atom that has gained or lost electrons, thus acquiring a charge.