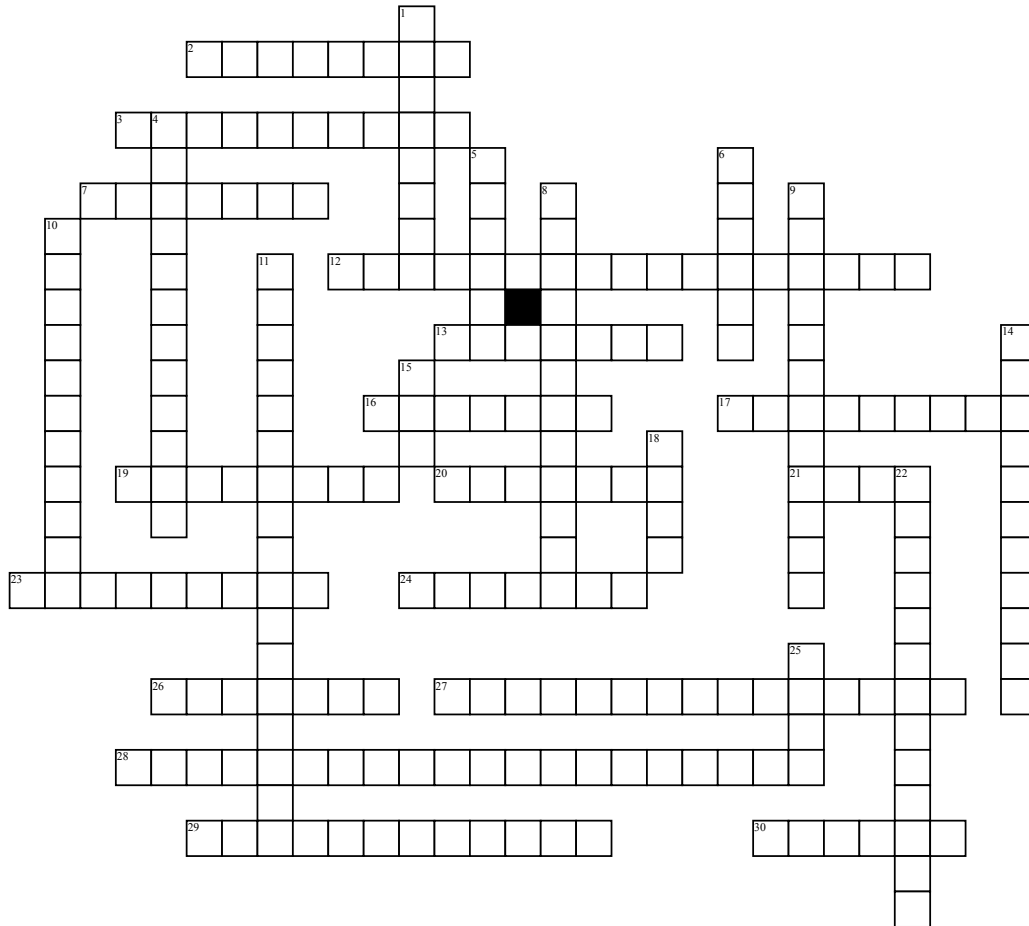


Chapter 1 vocab



Across

2. what moves around the nucleus of an atom?
 3. What is the sum of the number of protons and neutrons in an atom's nucleus?
 7. what material results from a chemical reaction?
 12. what is called for the attraction of a given atom for the electrons of a covalent bond?
 13. what potential patterns of electron density that may be formed in an atom or molecule by one or more electrons?
 16. what liquid that is homogenous mixture of 2 or more substance called?
 17. what chemical bond results from the attraction between oppositely charged ions?
 19. if a substance is made of two or more different elements combined in a fixed ratio, what is it called?
 20. what substance cannot be broken down to any other substance by chemical reaction?
 21. what substance reduces the hydrogen ion concentration of a solution?
 23. what chemical rule is needed for each atom has eight electrons in its valence shell?

Word Bank

polar covalent bond
 valence electron
 Atom
 isotope
 element
 orbital

electron shell
 octet rule
 hydrophilic
 nonpolar covalent bond
 ionic bond
 product

ion
 mass number
 hydrogen bond
 electron
 neutron
 molecule

electronegativity
 atomic number
 hydrophobic
 atomic symbol
 compound
 covalent bond

proton
 base
 Acid
 buffer
 matter
 solvent

24. what subatomic particle having no electrical charge (electrically neutral)?
 26. what is it called when one of several atomic forms of an element, each with the same number of protons but a different number of neutrons?
 27. what is an electron in the outermost electron shell called?
 28. what type of bond in which electrons are equally shared?
 29. what type is a weak chemical bond?
 30. what minimizes changes in pH when acids or bases are added to the solution?

Down

1. what is the name for two or more atoms held together by covalent bonds?
 4. what is a shorthand interpretation of an element, molecule or a compound called?
 5. what takes up space and has mass?
 6. what subatomic particle with a single positive electrical charge called?
 8. what does proton in the nucleus of an atom tells us?

9. what type of strong chemical bond which two atoms share one or more pair of valence electrons?
 10. what has an affinity for water?
 11. what bond between atoms that differ in electronegativity?
 14. what has no affinity for water?
 15. what atom or group of atoms that has gained or lost one or more electron called?
 18. What is the smallest unit of matter that retains the properties of an element?
 22. what is it called when an energy level of electrons at a average distance from the nucleus of an atom?
 25. What substance increases the hydrogen ion concentration of a solution?