

Name _____

Chemistry

___/___/___

Chapter 6 Vocabulary - Define each of the following on a separate sheet of paper. All definitions must be hand written.

1. acid - a compound containing hydrogen that ionizes to yield hydrogen ions (H⁺) in water
2. activity series - a table listing metals in order of decreasing activity
3. aqueous solution - a solution where the solvent is water; an aqueous solution is represented by aq in chemical reactions
4. balanced equation - a chemical equation where mass is conserved; there are equal amounts of atoms of each element on each side of the equation
5. base - a compound that ionizes to yield hydroxide ions
6. catalyst - a substance that speeds up a chemical reaction
7. chemical equation - an expression representing a chemical reaction
8. coefficient - the number written in front of a formula in a balanced chemical equation
9. combination reaction - a chemical reaction in which two or more reactants combine to form a single product; also called a synthesis reaction
10. combustion reaction - a chemical change in which oxygen reacts with another substance usually producing heat and light energy; $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O} + \text{heat}$
11. complete ionic equation - an equation for a chemical reaction in solution where all strong electrolytes are shown as ions
12. decomposition reaction - a chemical change in which a substance is broken down into two or more simpler substances
13. decomposition of a carbonate - a chemical reaction where a metal oxide and carbon dioxide are produced
14. decomposition of a chlorate - a chemical reaction where a metal chloride and oxygen gas are produced
15. decomposition of a hydrate - a chemical reaction where water is released and an anhydrous salt remains
16. diatomic elements - a group of seven elements (H,N,O,F,Cl,Br,I) which are commonly found as molecules consisting of two atoms of the element
17. double displacement reaction - a chemical reaction where the cations of two different compounds switch
18. insoluble - a substance that does not dissolve appreciable in a particular solvent
19. law of conservation of mass - matter is neither created nor destroyed
20. net ionic equation - a chemical equation where only the ions undergoing a chemical change are shown
21. oxidation - the loss of electrons by an atom, ion or molecule that results in an increase in oxidation number
22. oxidizing agent - a substance that accepts electrons and is reduced in a redox reaction
23. precipitate - solid particles produced in a liquid by a chemical reaction
24. product - a substance formed in a chemical reaction
25. reactant - the starting substance in a chemical reaction
26. redox reaction - a reaction where one or more electrons are transferred from one substance to another so that oxidation numbers change

27. reducing agent - the atom, ion or molecule that donates electrons and is oxidized in a redox reaction
28. reduction - the gain of electrons by an atom, ion or molecule that results in a decrease in oxidation number
29. single replacement reaction - a chemical change where a single element replaces an element that is in a compound
30. skeleton equation – a chemical equation that does not indicate the relative amounts of reactants and products
31. soluble - a substance that can be dissolved in a particular solvent
32. spectator ion - an ion that does not change composition or oxidation number during a chemical reaction
33. subscript - in chemistry, a number written below the line in a chemical formula and referring to the amount of that particular atom there are in the molecule

www.sartep.com