



I'm not robot



**I am not robot!**

**SYNTHESIS** Types of Chemical Reactions. This allows us to treat chemical equation Chemical Reactions and Equations. Such changes are called chemical. Chemical bonds: The forces holding atoms together in matter. Chemical bonds are broken and new chemical bonds made. grapes get fermented. Explain that in most chemical reactions, two or more substances, called reactants, interact to create different substances called products. Oxidation: Lose of electrons. b. Oxidation Numbers. c. Acid and base combine to neutralize each other in aqueous solutions, usually resulting in a salt and water. The subscripts tell you how many of each ion is needed to balance the charges in Chemical reaction: A chemical reaction occurs when a substance or a mixture of substances undergoes a change which produces new substances. The law states, that in a chemical reaction atoms are neither created or destroyed, only rearranged. Chemical Equation The complete (and balanced) chemical reaction is thus  $K_3PO_4 + 3MgCl_2 \rightarrow Mg_3(PO_4)_2 + 6KCl$ . milk is left at room temperature during summers. Chemists have identified many millions of different chemical compounds that can react in many different ways to form new chemical A chemical change or chemical reaction is a process in which one or more pure substances are converted into one or more different pure substances. Chemical Reaction: Bonds and atoms are rearranged to form new compounds. Reactants: The initial Key Objectives DESCRIBE what happens during a chemical change IDENTIFY four possible clues that a chemical change Chapter Chemical Equations Chemical Equation Concepts. an iron tawa/pan/nail is left exposed to humid atmosphere. Key Chemistry Terms. Metals usually lose electrons (are oxidized)  $Fe(s) + Cl_2(g) \rightarrow 2FeCl_2(s)$  [demo] composition reactions: Compound breaks up into elements or simpler compounds  $Ag_2O \rightarrow 2Ag(s) + O_2(g)$  Oxygenation: Reaction of element or compound Forming a precipitate can help drive the reaction to the right. food gets digested in our body Types of redox reactions Combination reaction elements combine to form a compound.

**COMMON TYPES OF CHEMICAL REACTIONS.** Tell students that burning a candle is an example of a chemical reaction. Key Chemistry Terms. (see section 4) Balanced chemical equation: A chemical equation in which the numbers of atoms of each element is the same on both sides [ 2 Chemical Chemical Reactions. Chemical Reaction: Bonds and atoms are rearranged to form new compounds.  $H^+$  Chemical Reactions. a. food is cooked. Precipitation: Insoluble compound formed in a  $K_2Cr_2O_7$  is an ionic compound composed of  $2K^+$  and  $Cr_2O_7^{2-}$  ions. Oxidation Numbers. A fuel, typically a hydrocarbon, reacts with oxygen gas to form carbon dioxide and water, which generates heat and light. Procedure Carefully light a tea light candle or other small candle In a chemical reaction the atoms of the reactants rearrange to give new substances.

**COMBUSTION.** © ChemTalk Sharable with attribution via creative commons BY-NC-ND License. Chemical Equation: Symbolizes the chemical reaction with chemical formulas. es change into new substances. All of the matter present in the reactants is also present in the products of the reaction. CHAPTER C. Consider the following situations of daily life and think what happens when—.  $Cr_2O_7^{2-}$  ion could be considered as made up of  $2Cr^{+6}$  and  $7O^{2-}$  The charge on each  $Cr^{+6}$  ion is obtained because oxygen always have an oxidation number and total of ON of atoms in  $Cr_2O_7^{2-}$  should add up to which is the charge on the ion terms reactants, products, and chemical reaction. **NEUTRALIZATION.** The Chemical equations embody a fundamental law of nature called the law of conservation of matter. Reduction: Gain of electrons, charge is “reduced”. transformations, or reactions.