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Stoichiometry and Chemical Reactions

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| **Across**  **3.** One element replaces another element in a compound.  **5.** What holds individual atoms of compounds together.  **9.** A chemical reaction where heat is released to it's surroundings.  **10.** A representation of a chemical reaction that uses symbols to represent the relationship between the reactants and the products.  **11.** The mass of one mole of a substance.  **13.** A chemical substance formed as a result of a chemical reaction.  **14.** A unit of amount, the amount of a substance containing 6.02x10^23 entities.  **16.** Two or more substances combine to form a new compound.  **17.** A reactant in a chemical reaction that determines the amount of product that is formed.  **19.** A process in which one or more substances are changed into others.  **20.** Used in a chemical equation to determine mole ratios. | **Down**  **1.** The smallest amount of energy needed to start a chemical reaction.  **2.** A chemical reaction that needs heat.  **4.** A combination of chemical symbols and numbers to represent a substance.  **6.** The ratio of the actual yield to the theoretical yield shown as a percent.  **7.** A compound decomposes into two or more simpler substances.  **8.** The reactant in a chemical equation with a greater amount than necessary to react completely with the limiting reactant.  **12.** A substance that changes the rate of a chemical reaction without being used up or changed very much.  **15.** The quantitative relationship between two or more substances especially in processes involving chemical or physical change.  **18.** A chemical substance that is present at the beginning of a chemical reaction. |