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| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Chemical Reactions

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  C |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | O |  |  |  |  |  |  |  | 2  S |  |  |
|  |  |  |  |  | 3  E |  |  |  |  |  |  |  |  |  |  |  |  |  | M |  |  |  |  |  |  |  | I |  |  |
|  |  |  |  |  | N |  |  |  |  |  |  |  |  |  |  |  |  |  | B |  | 4  D |  |  |  |  |  | N |  |  |
|  |  |  |  |  | D |  |  |  |  |  |  |  |  |  |  |  |  |  | U |  | E |  | 5  C |  |  |  | G |  |  |
|  |  |  |  |  | O |  |  |  | 6  R |  |  |  |  |  |  | 7  C |  |  | S |  | C |  | O |  |  |  | L |  |  |
|  |  |  |  |  | T |  |  |  | E |  |  |  |  |  |  | H |  |  | T |  | O |  | E |  |  |  | E |  |  |
|  |  |  |  |  | H |  |  |  | D |  |  |  |  | 8  O |  | E |  |  | I |  | M |  | F |  |  |  | D |  |  |
|  |  |  |  |  | E |  |  |  | U |  |  |  |  | X |  | M |  |  | O |  | P |  | F |  |  |  | I |  |  |
|  |  |  |  | 9  P | R | O | D | U | C | T |  |  |  | I |  | I |  |  | N |  | O |  | I |  |  |  | S |  |  |
|  |  |  |  |  | M |  |  |  | T |  |  |  |  | D |  | C |  |  | R |  | S |  | C |  |  |  | P |  |  |
|  |  |  |  |  | I |  |  |  | I |  |  |  | 10  B | A | L | A | N | C | E |  | I |  | I |  |  |  | L |  |  |
|  |  |  |  |  | C |  |  |  | O |  | 11  C |  |  | T |  | L |  |  | A |  | T |  | E |  |  |  | A |  |  |
|  |  |  |  |  | R |  | 12  S | Y | N | T | H | E | S | I | S | R | E | A | C | T | I | O | N |  |  |  | C |  |  |
|  |  |  |  |  | E |  |  |  |  |  | E |  |  | O |  | E |  |  | T |  | O |  | T |  |  |  | E |  |  |
| 13  R | E | A | C | T | A | N | T |  |  |  | M |  |  | N |  | A |  |  | I |  | N |  |  |  |  |  | M |  |  |
|  |  |  |  |  | C |  |  |  |  |  | I |  |  |  |  | C |  |  | O |  | R |  |  |  |  |  | E |  |  |
|  |  | 14  E | X | O | T | H | E | R | M | I | C | R | E | A | C | T | I | O | N |  | E |  |  |  |  |  | N |  |  |
|  |  |  |  |  | I |  |  |  |  |  | A |  |  |  |  | I |  |  |  |  | A |  |  |  |  |  | T |  |  |
|  |  |  |  |  | O |  | 15  C | A | T | A | L | Y | S | T |  | O |  | 16  P | R | E | C | I | P | I | T | A | T | E |  |
|  |  |  |  |  | N |  |  |  |  |  | E |  |  |  |  | N |  |  |  |  | T |  |  |  |  |  | E |  |  |
|  |  |  |  |  |  |  |  |  |  |  | Q |  |  |  |  |  |  |  |  |  | I |  |  |  |  |  | A |  |  |
|  |  |  |  |  |  |  |  |  |  | 17  S | U | B | S | C | R | I | P | T |  |  | O |  |  |  |  |  | C |  |  |
|  |  |  |  |  |  |  |  |  |  |  | A |  |  |  |  |  |  |  |  |  | N |  |  |  |  |  | T |  |  |
|  |  |  |  |  |  |  |  |  |  |  | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |
|  |  |  | 18  D | O | U | B | L | E | D | I | S | P | L | A | C | E | M | E | N | T | R | E | A | C | T | I | O | N |  |
|  |  |  |  |  |  |  |  |  |  |  | O |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | N |  |  |
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| **Across**  **9.** The new substances that are formed in a chemical reaction.  **10.** A condition in which different elements are equal or in the correct proportions. There are three types of visual balance: symmetry, asymmetry, and radial.  **12.** A chemical reaction that occurs when a substance reacts with oxygen, releasing energy in the form of heat and light combustion reaction A chemical reaction in which two or more reactants combine to produce a single product.  **13.** The starting materials in a chemical reaction.  **14.** Energy is released.  **15.** A substance that initiates or accelerates a chemical reaction without itself being affected.  **16.** A solid that forms from a solution during a chemical reaction.  **17.** Tells how many atoms of an element are contained in one molecule or formula unit.  **18.** A reaction in which a gas, a solid precipitate, or a molecular compound forms from the exchange of ions between two compounds. | **Down**  **1.** A chemical reaction that occurs when a substance reacts with oxygen, releasing energy in the form of heat and light.  **2.** Chemical reaction in which one element replaces another element in a compound.  **3.** Energy is absorbed  **4.** A reaction in which a single compound breaks down to form two or more simpler substances.  **5.** Tells how many atoms, molecules, or formula units take part in a reaction.  **6.** Any process in which electrons are added to an atom or ion.  **7.** A process during which chemical bonds between atoms are broken and new ones are formed. Producing one or more different substances.  **8.** A chemical change in which a substance combines with oxygen, as when iron oxidizes, forming rust.  **11.** A representation of a chemical reaction that uses symbols to show the relationship between the reactants and the products. |