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

Manufacturing Worksheet

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|  |  |  |  |  | 11  A | U | T | O | M | A | T | E | D | G | U | I | D | E | D | V | E | H | I | C | L | E | S |  |  |
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|  |  |  | 15  O | P | E | R | A | T | O | R | S | A | F | E | T | Y | Z | O | N | E |  |  |  |  |  |  |  |  |  |
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| **Across**  **3.** Very specific products that are made to order. Very expensive form of production.  **5.** To shape a material by forcing it through a die  **8.** Specific, measurable abilities that you would need to qualify for a job  **10.** A tool that moves with a workpiece through a machine in order to provide repeatability and accuracy in the manufacturing of products  **11.**  Mobile robot that follows markers or wires in the floor, or uses vision, magnets, or lasers for navigation  **12.** Metal not containing iron.  **14.** Placing flat sheet material into a stamping press where a tool and die presses the material into a new shape  **15.** Stay 3 feet or arm's length away from machines in use. Only operator and instructor are allowed in this zone. | **Down**  **1.** The use of software to control machine tools in the manufacturing process  **2.** Components that are identical so that they will fit into any assembly of the same type.  **4.** Land, equipment, and money used to start or maintain a business  **6.** Example of Additive Manufacturing  **7.** A joining process that melts the base metal and adds a filler material which then cools and forms a strong joint  **9.** Shaping pliable raw material using a rigid frame  **13.** Amount of a commodity, product, or service available |