Tools:

- Printer
- 8.5” x 11” paper
- Scissors

Directions:
1. Print
2. Fold paper in half vertically
3. Cut along dashed lines
An individual responsible for every step in producing a finished product; also, someone skilled in a trade; a craftsperson (for example, a woodworker).

An arrangement of workers, machines, and equipment used to quickly produce a large number of identical products by assembling parts in a planned sequence. Also called a production line.

The use of computers or automatic machines to control machine operations and make a product.

A tool in which movements and operations are controlled by a computer program.
continuous improvement

The term used to describe each joint or direction of movement in a robotic arm.

A system in which each person is assigned one specific task in the making of a product.

One that is designed to last for a long time.

degree of freedom

division of labor

durable product
efficiency

A building in which products are manufactured.

flexible manufacturing system

A manufacturing system in which machine tools can be changed quickly and easily to produce several different kinds of parts.

interchangeable parts

Parts that are the same shape and size.
just-in-time delivery

A system in which only the parts needed for the current day's production are made.

lean manufacturing

A system of manufacturing that focuses on reducing waste, improving quality, and increasing efficiency.

manufacturing

The process of using raw materials to create products.

mass production

The process of making products in large quantities to reduce the unit cost.
nondurable product

production technology

rectangle

subassemblies

A product that is meant to be used once and then discarded.

The systems and processes that are used to manufacture products.

A four-sided shape in which the opposite sides are parallel and the adjacent sides are at 90 degrees to each other.

Components of an assembly that consist of several individual parts that are preassembled before the final product is assembled.
sustainable manufacturing

The use of processes designed not only to reduce waste, but also to conserve resources such as electrical energy and water. Products designed and produced sustainably also consider what happens to the product after it is no longer useful.

tolerance

The amount by which a part can vary in size or shape and still be interchangeable with similar parts.

work cell

All of the equipment and processes used to make a specific part in lean manufacturing systems.

zero defects

A philosophy that no defects are acceptable; parts are to be made right the first time.