Background
Industrial and systems engineers often work on logistics problems. Logistics can range from supply chain management and production logistics to distribution logistics.

Define – Problem Statement
You are an Industrial and Systems Engineer and have been asked to provide instructions to a new employee at the Mr. Potato Head Plant. The new employee is the final test operator after Mr. Potato Heads have been assembled. The plant operates from 9:00am to 5:00pm, with an hour break for lunch from 12:00pm to 1:00pm. If there are no Mr. Potato Heads waiting to be processed, the final test operator is to help paint hats and moustaches until a Mr. Potato Head arrives. The Mr. Potato Heads are inspected to see if they are “Type A”, “Type B”, or “Type C”. After determining their type, they are placed in the bins labeled A, B, or C depending on the type. If they are not one of these three types, they were made incorrectly and must be placed in the “Recycle Bin”.

Instructions
Represent/Plan
- Create an algorithm (detailed set of step-by-step instructions) for this new plant worker to do this job correctly.
- Based on this algorithm create a flowchart. You may use the “flowchart symbols” in PowerPoint to create your flowchart, but other options are possible (Word, Excel*, neatly by hand).
- Hint: Include checks on the time to determine if the worker should be working.
- Document all givens and any assumptions you make.

Document
- Write out the algorithm including givens and assumptions.
- Create a flowchart based on the algorithm.
- Staple the algorithm and flowchart together and turn in.

*See the Optional Flow Chart Template using Excel referenced on the EEIC website for MatLab_1 and located under Contents / Resources. This document provides a variety of flow chart symbols pre-packaged with connecting line and includes detailed instructions, making flow chart creation much simpler.