




(40 pts) Approx. 4 days

The second part of our unit will be making your model a reality! By now, you should have created a working Autodesk Assembly that models what you want your Automata to look like and how it should function. You may not have modeled in detail every single decoration, but the moving parts (crank, cams, followers) should all be functioning correctly in Autodesk before you start building!

Here, you'll use your Autodesk Diagram as a blueprint for building as you get into the makerspace and build your machine!

1. **Building Plan:** Start by writing out a plan for how you want to build your Automata! Your plan should include:
  - a. A picture of what you're trying to build
  - b. A list of the order in which you should build/assemble things
  - c. Dimensions and materials labeled so you know how big to make things
  - d. A list of the machines you'll need to use
  - e. Ideas for theme or decoration
2. **Build in Makerspace:** Next, you get to head back to the makerspace and *actually do it!* Follow your plan to build and perfect your Automata! Get it running smoothly, and be sure to talk to Mr. Benshoof when you have questions about the tools or need help getting things working!
3. **Automata Reflection:** In your engineering notebook, write a full-page reflection on the process you followed to design, model, and build your working Automata. As you write your reflection, answer the following questions:
  - a. What was the hardest part about the project?
  - b. What was the easiest part?
  - c. What makes your Automata extra cool?
  - d. If you were going to build another one, what information would help you do it better?
  - e. What did you learn in the process that you want to remember for future work?

Part 2: Tasks	10-8 points	7-5 points	4-0 points
 Building Plan	+ You made a written plan of how you would build your machine + Your plans include details about dimensions, parts, pieces, and process!	- Your plan is missing important aspects	- Your plan is completely missing
 Build in Makerspace	+ You built your Automata! + Your Automata works as intended + You followed your plan closely	- Your Automata does not function properly - Your Automata is sloppy - You did not really follow your plan	- Your Automata is missing essential elements
 Automata Reflection	+ You completed a Product Disassembly Chart for your complex object as you took it apart	- Your Disassembly Chart is not fully filled out	- Many major components missing from your chart