

(85 pts) Approx. 6 days




The final part of our unit is to use all the tools of Autodesk to build the different parts of your favorite Automoblox car in the software. This part of the unit will be very time consuming because the different automoblox parts are pretty complex; but the unit as a whole is meant to give you a chance to learn all the different tools, features, and work flows available in Autodesk. Take your time, and take some notes along the way!

- Automoblox/Autodesk Notes** – Watch the first three presentations on the website: *Example Body Block Build*, *Example Wheel Build*, and *Example Automoblox Windshield*. These videos will NOT be showing you exactly how to build the part for YOUR Automoblox car, but they will be showing how to build representative Automoblox pieces. Take a full page of notes (especially on the wheel and windshield).
- Create Automoblox Parts** – Select your Automoblox car and dismantle it. A few weeks ago you should have taken a lot of measurements on these parts, and now it’s time to put them to use. Refer to your earlier drawings and use a caliper to get dimensions from each piece. Your job is to recreate every part of the Automoblox car in as much detail as possible. This means you need to make a new part file for every Automoblox part, and then create it with every rounded edge, headlight, post, peg, and groove on it. You can even change the color of the part or parts to match the color of the actual car. One important thing to keep track of is making sure that all the connecting pegs and holes are in the correct spots on the blocks. If any of the holes or pegs are misplaced, the car won’t look right when it’s assembled. This will all take a long time, and getting 1 or 2 Automoblox parts modeled per class period will be a challenge! Be patient, and make sure your models are looking good!

SAVE YOUR AUTOMOBLOX PARTS AS .IPT FILES ON YOUR JUMP DRIVE!

- Automoblox Assembly** – Now, watch the last presentation *Example Automoblox Assembly* and add to your notes from earlier. This video will show how to use constraints to assemble an example Automoblox car, but probably not YOUR Automoblox car. Using the proper constraints, assemble all the parts of your Automoblox car so it is fully together in the computer. When you’re done, your computer model should look almost exactly like your actual car!

SAVE YOUR AUTOMOBLOX ASSEMBLY AS A .IAM FILE ON YOUR JUMP DRIVE!

| Part 3: Tasks | 10 points | 8-6 points | 5-0 points |
|--|--|--|---|
|  Automoblox in Autodesk Notes | + You took a full page of notes on how to create Automoblox parts in Autodesk + Your notes include details about how to make wheels and windshields | - Your notes are not a full page - Your notes do not include details on the wheels and windshields | - Your notes are missing |
|  Create Automoblox Parts | + You created a new Autodesk part for every part on your Automoblox + Your modeled parts are very precise, the right size, and all the proper details (ridges, grooves, etc) are included | - You missed a part - Your parts do not include full details - Your parts have holes/pegs in the wrong locations | - Your parts are very incomplete - Your parts are missing |
|  Create Automoblox Assembly | + Your parts are all assembled properly into the final car + Your final car looks a lot like the actual model + You assembled the car with the proper constraints | - Your assembly is incomplete - Your assembly is missing some parts | - You did not use constraints to make your assembly - Your assembly is missing |

