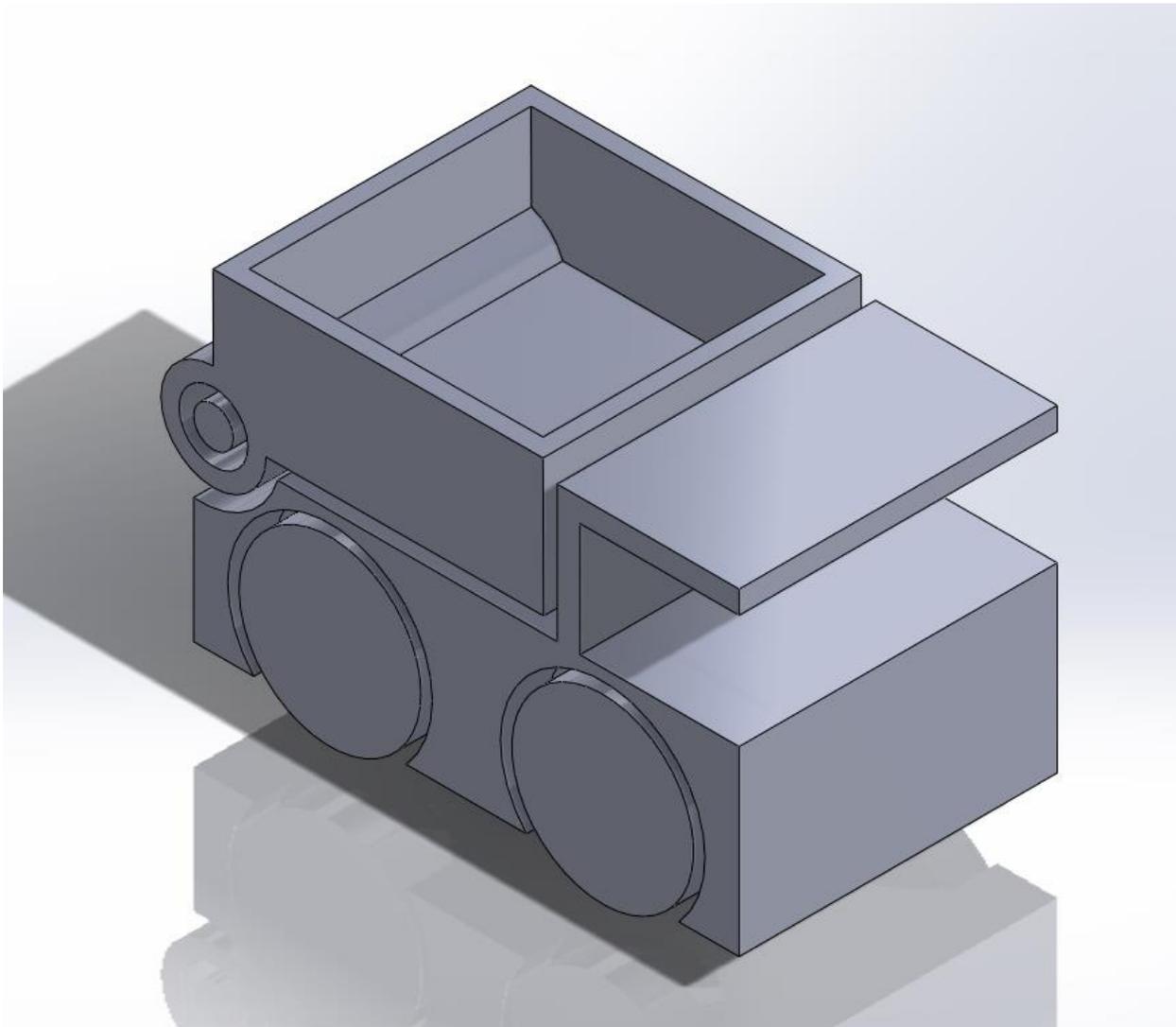
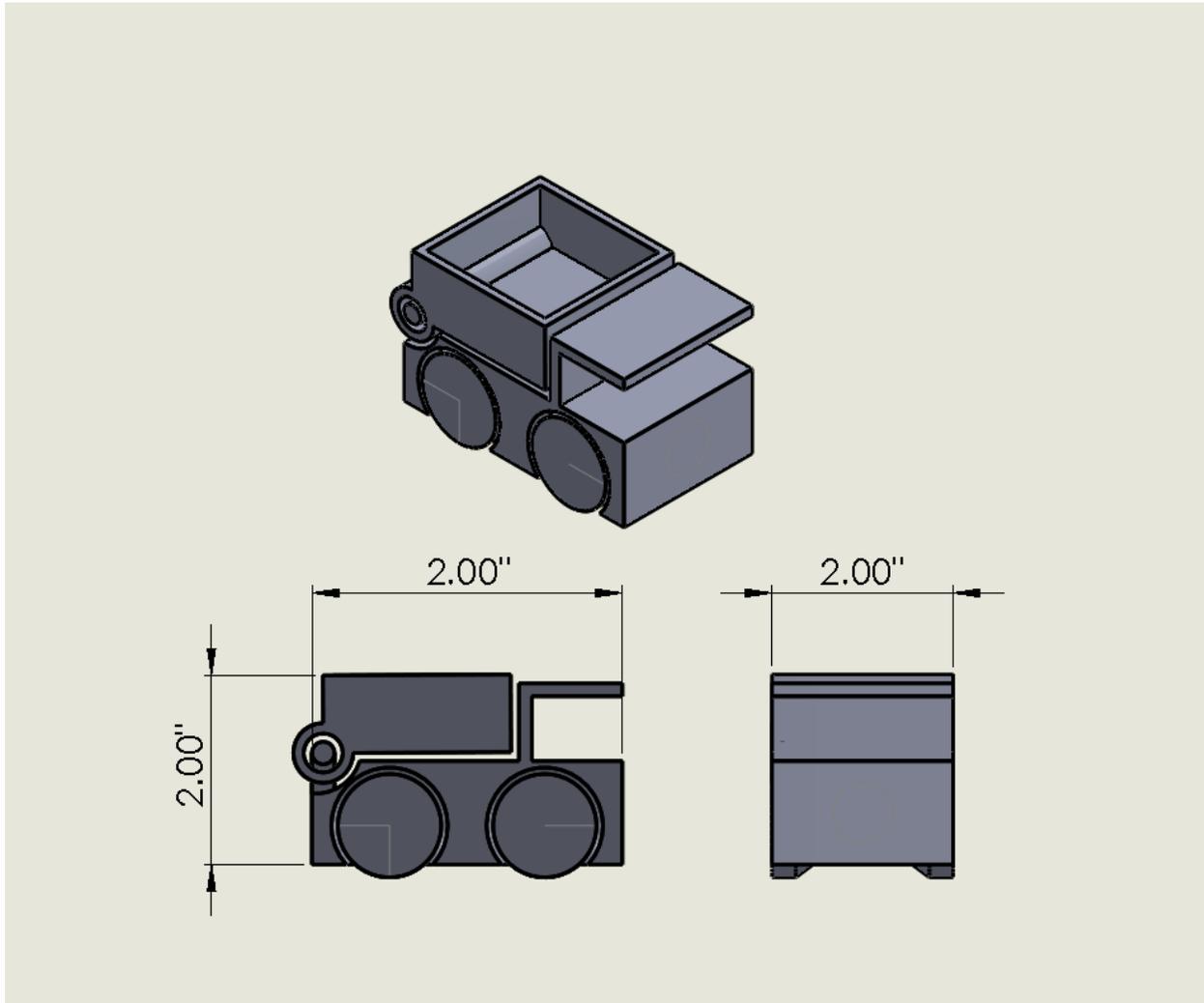


3D CAR MODEL



RULES:

- MUST BE NO LARGER THAN 2" x 2" x 2"
- MUST HAVE FUNCTIONING WHEELS AND ONE OTHER MOVING PART
- INCLUDED SHOULD BE A DETAILED DRAWING WITH DIMENSIONS, AND AN ANIMATION OF THE CAR WITH ITS MOVING PARTS
- ADD SOME COOL STUFF LIKE WHEEL DESIGNS AND DECALS



Only when all parts are done, tested in Solidworks, and approved by Mr. Bruggeman can you send the file to be printed on the 3D printer

1. Open your Solidworks file-
 - Go to save as > File type : .STL and save to desktop folder
2. Model repair: modelrepair.azurewebsites.net
Login: mbruggem@chicousd.org
Password: CHSengin
 - Upload file(s) into website; it will fix them then download the improved file. (When downloaded, your new file will have ‘_fixed’ at the end of the title.)
3. Load your file(s) onto a flash drive (or share files on Google Drive) and put all files on the main computer by the printer to complete next steps.
4. Load new file(s) into Cura
 - Follow settings instructions on following page
 - EXCEPTION: NO BRIM
5. Change the orientation of the part to the flat side of your wheels facing up. This will help the wheels spin better
6. Take all flash drives out, save G-Code to the SD card, then place card in printer
7. Lay tape on printer base; no gaps, but don't overlap pieces.

Instructions for sending parts to Orion 3D printer:

1. Quick Settings:
 - Home All

- Preheat PLA
2. Turn the white knob in the back of the printer till 2-4 in. of material comes from the nozzle. Wait a few seconds for it to cool and take it off before printing.
 3. Print File
 - Find G-CODE and select to print

REMEMBER:

Always clean up your workspace and delete your files off the SD card before you leave.

SET INSTRUCTIONS FOR G-CODE IN CURA:

EXCEPTION: NO BRIM

The image shows two side-by-side screenshots of the Cura software interface, specifically the 'Start/End-GCode' settings page. The left screenshot shows the 'Basic' tab selected, and the right screenshot shows the 'Advanced' tab selected. Both screenshots show various settings for quality, speed, and machine parameters.

Tab	Section	Parameter	Value
Basic	Quality	Layer height (mm)	.25
		Shell thickness (mm)	1.0
		Enable retraction	<input checked="" type="checkbox"/>
	Fill	Bottom/Top thickness (mm)	1
		Fill Density (%)	20
	Speed and Temperature	Print speed (mm/s)	60
		Printing temperature (C)	210
		Bed temperature (C)	50
	Support	Support type	None
		Platform adhesion type	Brim
Filament	Diameter (mm)	1.78	
	Flow (%)	100.0	
Advanced	Machine	Nozzle size (mm)	0.5
	Retraction	Speed (mm/s)	40.0
		Distance (mm)	5
	Quality	Initial layer thickness (mm)	0.2
		Cut off object bottom (mm)	0.0
		Dual extrusion overlap (mm)	0.15
	Speed	Travel speed (mm/s)	150
		Bottom layer speed (mm/s)	30
		Infill speed (mm/s)	0
	Cool	Minimal layer time (sec)	8
Enable cooling fan		<input checked="" type="checkbox"/>	