



Engineering Portfolio

2022-2023

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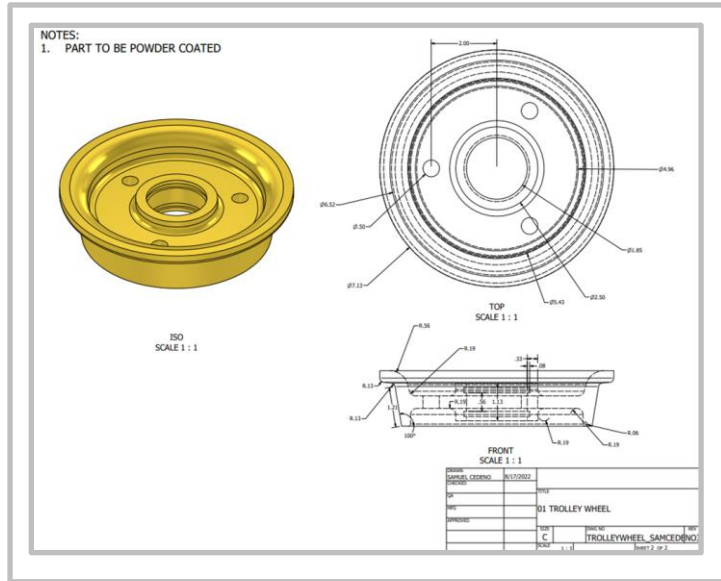
Samuel Cedeno

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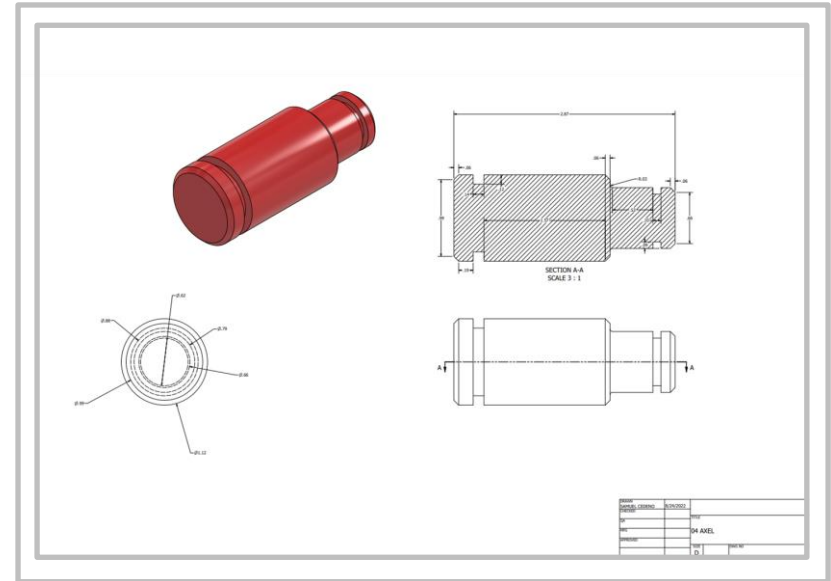
Trolley Wheel Drawing

This is a drawing of a part we had to make in my engineering class. This is just one part of a bigger project we had to make.



Trolley Wheel Axle Drawing

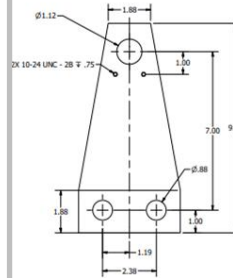
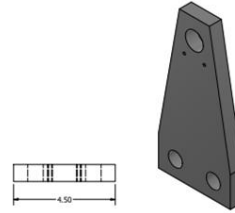
This is a drawing of the axle that is meant to hold and connect the side plate, trolley wheel and ball bearing.



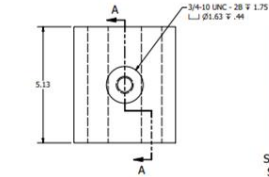
Drawings Of Additional Trolley Wheel Parts

NOTES:

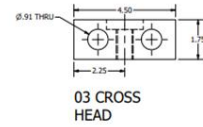
1. PART TO BE POWDER COATED



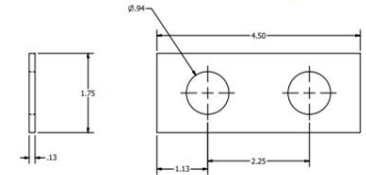
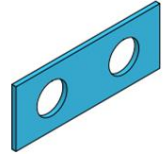
02 SIDE PLATE



SECTION A-A
SCALE 1 / 2



03 CROSS
HEAD

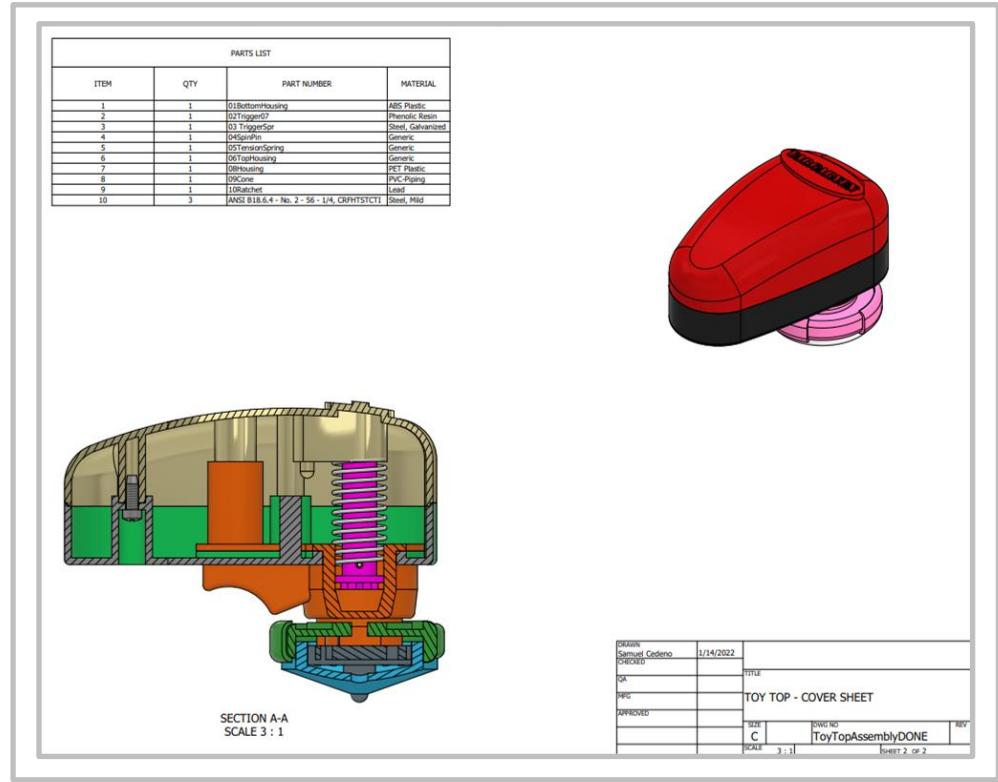


DESIGN	SAMUEL CEDENO	8/22/2022	TITLE	
PROJECT			DATE	
REV			02 SIDE PLATE 03 CROSS HEAD 06	
APPROVED			SCALE	1 / 2
			SHEET 3 OF 3	

Toy Top Closed Assembly Drawing



This is a drawing of a closed assembly we made for a toy top and the launcher.

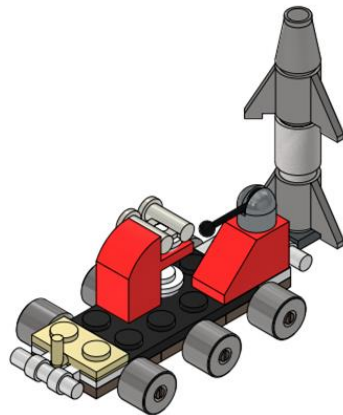


Drawing Of Lego Inventor Assembly

This is an assembly made up of parts that we made in inventor based off of real Lego pieces.

NOTES:

1. DEBURR ALL SHARP EDGES AND CORNERS AS NEEDED



ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	part11_barholder	
2	1	part5_holder	
3	2	part8_rocket	
4	1	part5_cylinder	
5	8	part10_cone	
6	3	part14_wheelhold	
7	1	part13_2x4	
8	6	part4_wheels	
9	1	part13_1x2ramp	
10	1	part12_igloo	
11	2	part2_stud	
12	1	part7_lever	
13	1	part13_barhold	
14	1	part9_redhalf	
15	1	part11_scanner	

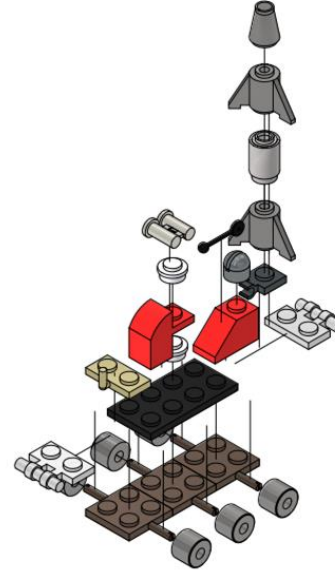
DESIGN	SAMUEL CEDENO	3/8/2022		
CHECKED			TITLE	
QA			FAUX LEGO ASSEMBLY	
ENG				
APPROVED				
			SIZE	DWG NO
			C	
			SCALE	3"
			SHEET 2 OF 2	

Drawing Of Exploded Lego Inventor Assembly

This is the exploded view of
the previous slide's
assembly.

NOTES:

1. DEBURR ALL SHARP EDGES AND CORNERS AS NEEDED

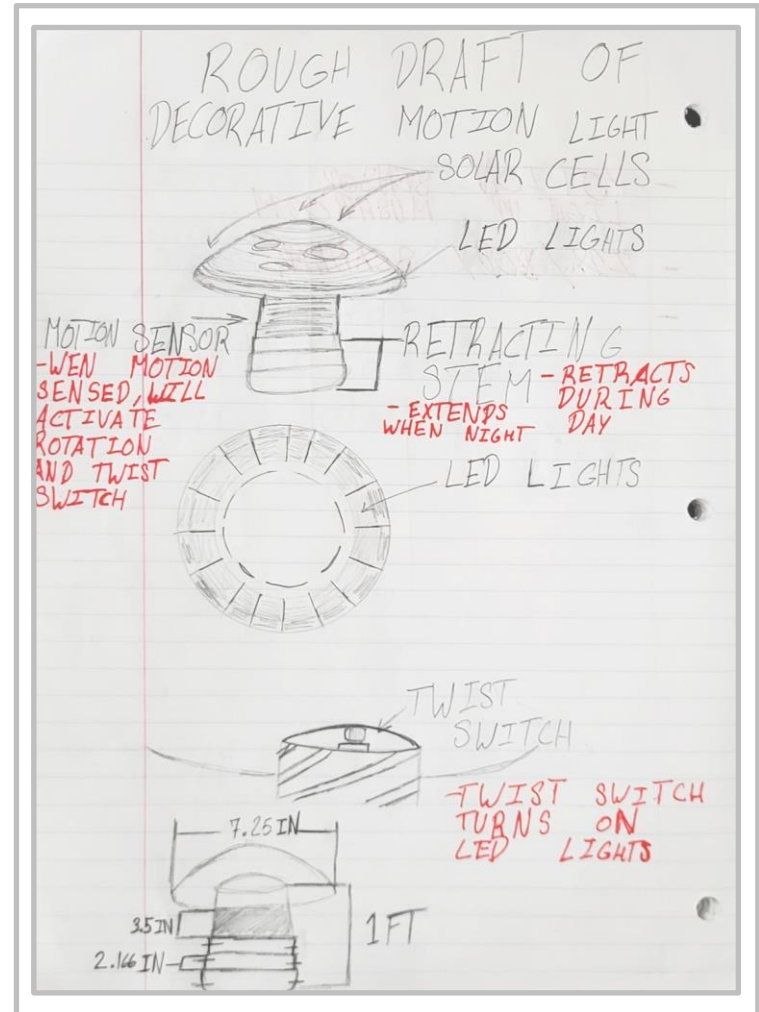


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	PART11_barholder	
2	1	part5_holder	
3	2	part8_rocket	
4	1	part5_cylinder	
5	1	part10_cone	
6	3	part14_wheelhold	
7	1	part3_2x4	
8	6	part4_wheels	
9	1	part3_1x2ramp	
10	1	part12_splco	
11	2	part9_stud	
12	1	part7_lever	
13	1	part13_barhold	
14	1	part9_rethelf	
15	1	part11_scanner	

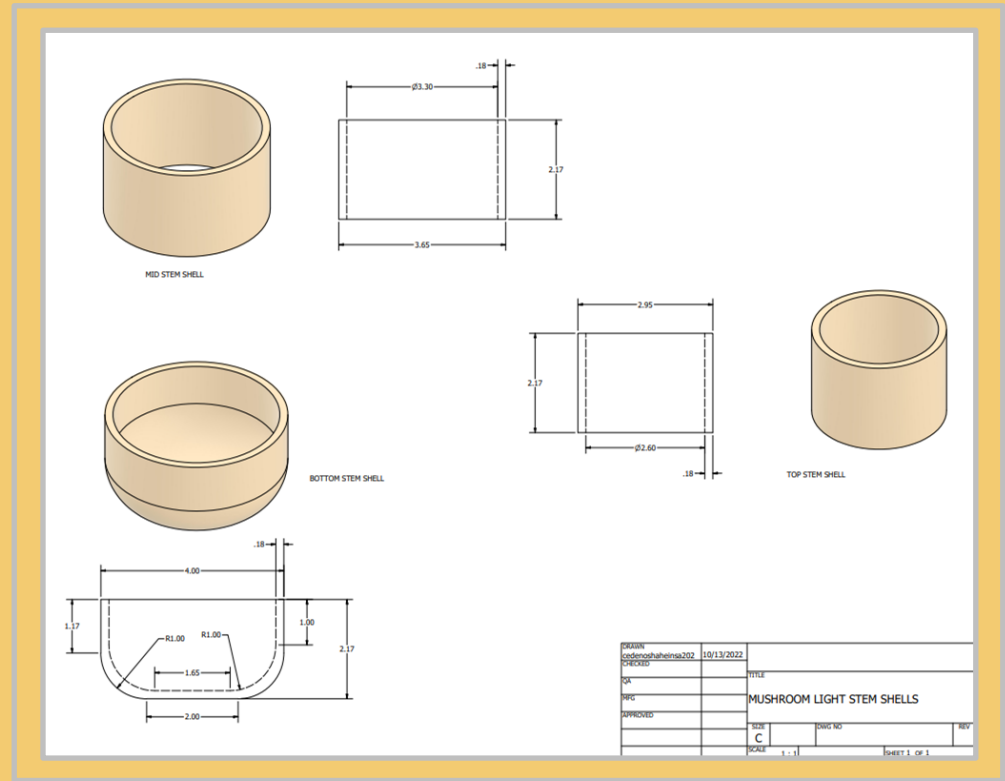
DESIGN	3/9/2022		
CHECKED			
QA		TITLE	
ENG		EXPLODED ASSEMBLY FAUX LEGOS	
APPROVED			
DATE		DATE NO	REV
C			
SCALE	3 : 1	SHEET 2 OF 2	

Rough Draft of Decorative Motion Light

These are the first few sketches I made for a mushroom based, motion activated light.



● ● ● Stem Shell Drawing

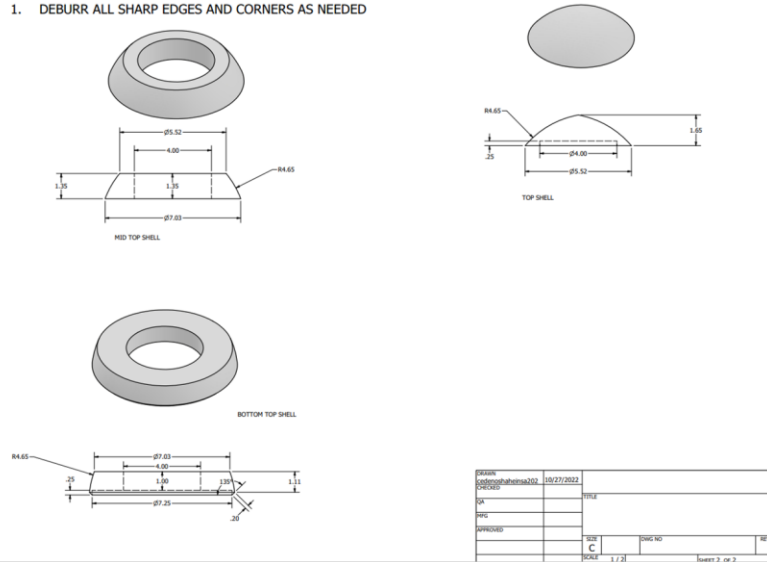


This the drawing for the shells of the stem for the motion activated mushrooms lights.

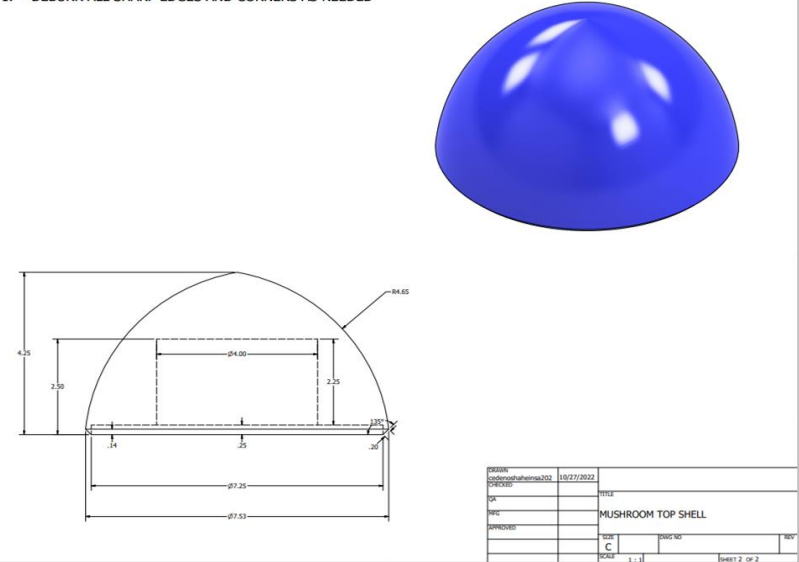
Drawings of Mushroom Top Shell

I was thinking of making 3 separate shells for the top of the mushroom but I ultimately decided to just make 1 solid shell.

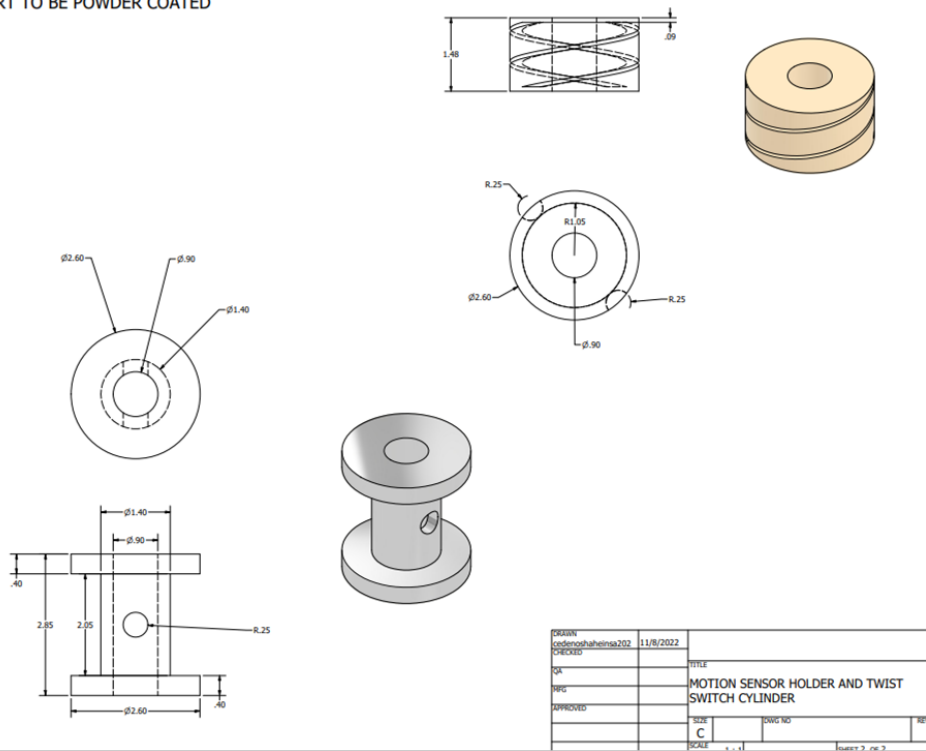
NOTES:
1. DEBURR ALL SHARP EDGES AND CORNERS AS NEEDED



NOTES:
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NOTES:
1. PART TO BE POWDER COATED

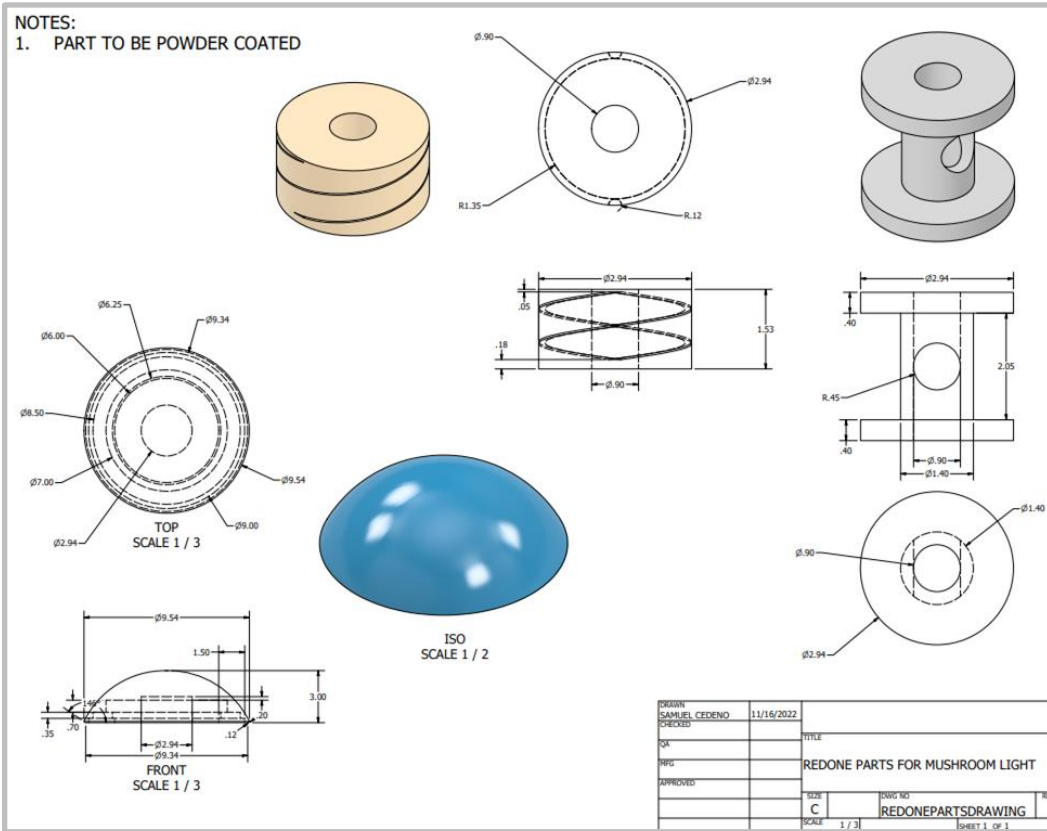


Motion Sensor Holder and Twist Switch Cylinder Drawing

These were the last parts I made for the motion activated mushroom lights.

Mushroom Top, Screw Cylinder, and Motion Sensor Holder Redone

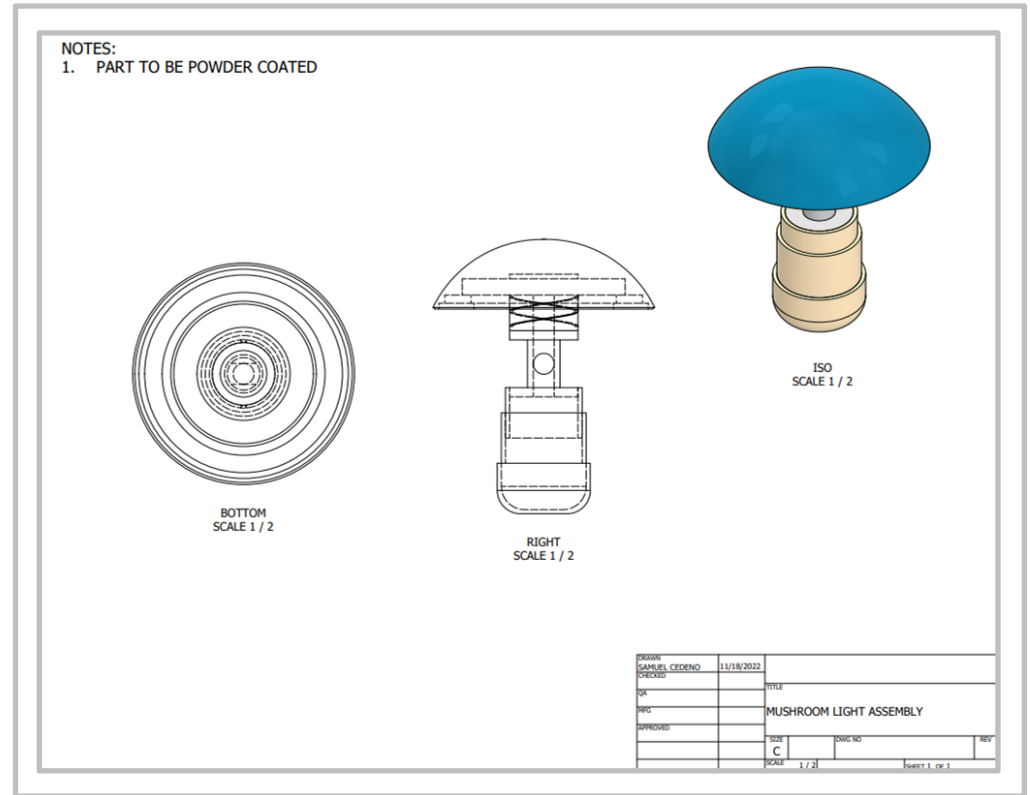
I had to redo these parts because some of the measurements didn't align correctly, and I wanted to changed some parts of the design in general.





Mushroom Light Assembly

Drawing of the Mushroom Light Assembly.



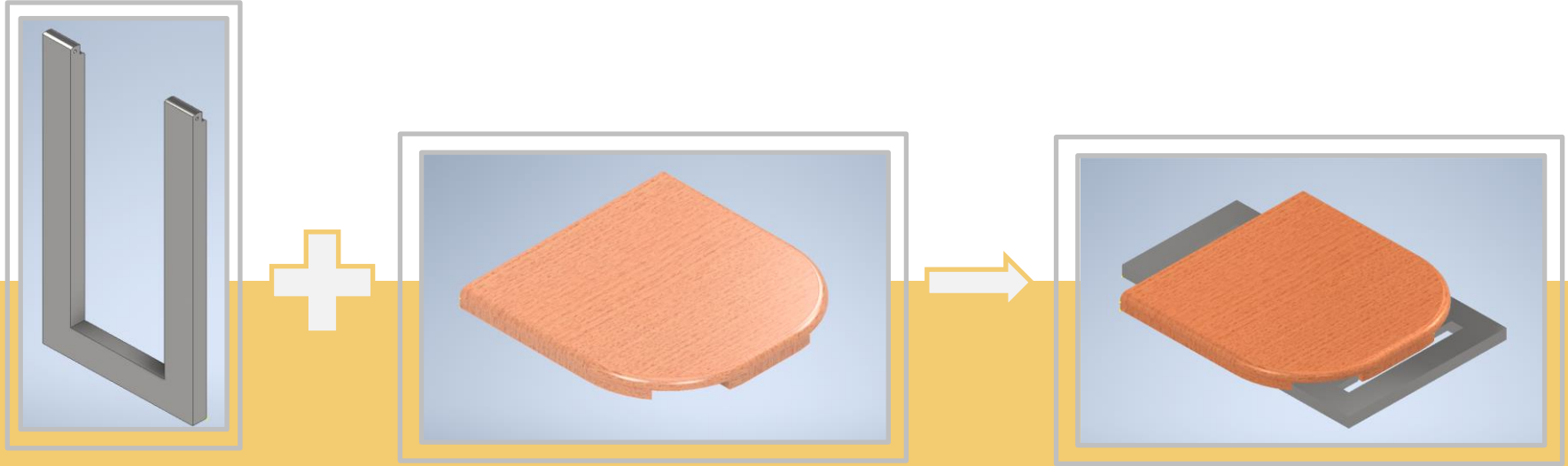
1:1 Cardboard Model Of Mushroom Light

This is the start of the cardboard model of the mushroom light



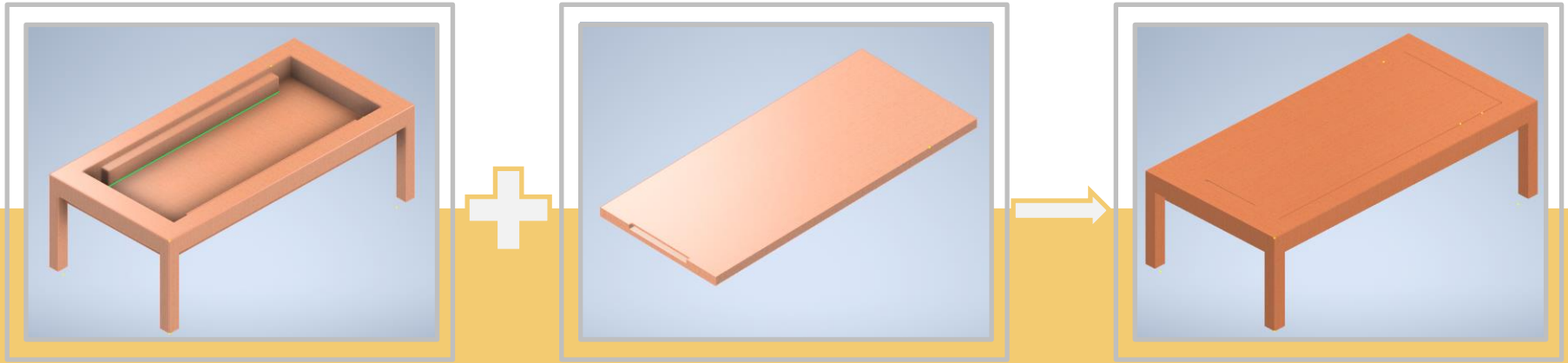
Foldable Stool Assembly

This was one of the parts that was part of a transforming furniture piece.



Storage Table Assembly

This was the other part of the transforming furniture I made. Three of the foldable stools would go inside of the table for storage, and then be taken out and unfolded when in use.

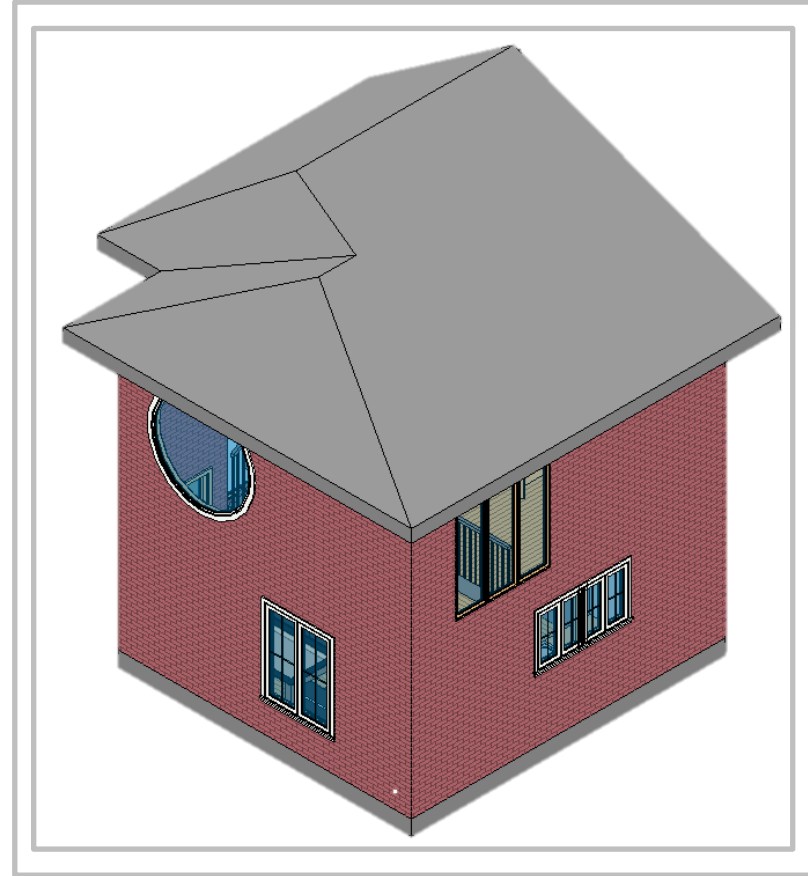
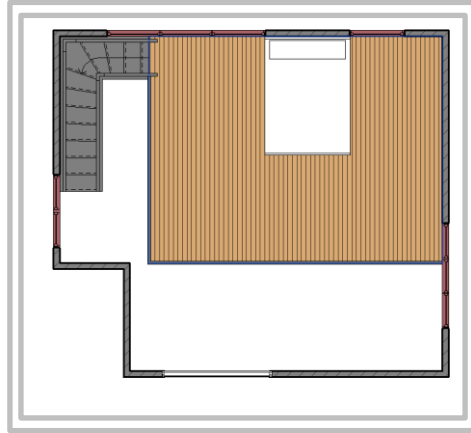


Tiny Home (Revit)

These are the floor plans and 3D view of the tiny home I designed in Revit. The transforming furniture that I made was meant to be used in this tiny home.



FLOOR PLANS



3D VIEW



Thank you!