

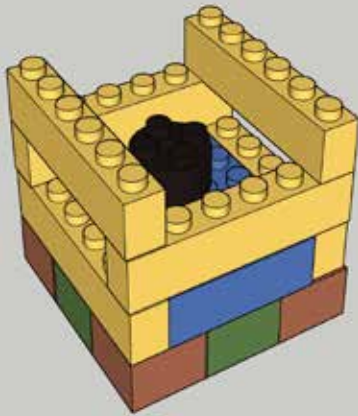
Assignment 2

Caitlin Owen

Form 3100 - Fall 25

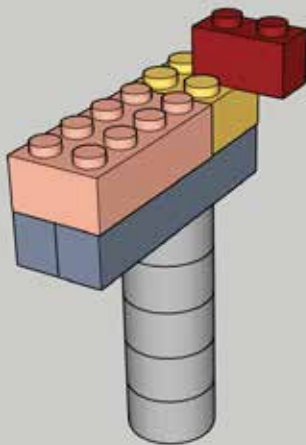
September 6th, 2025

See How To Make...



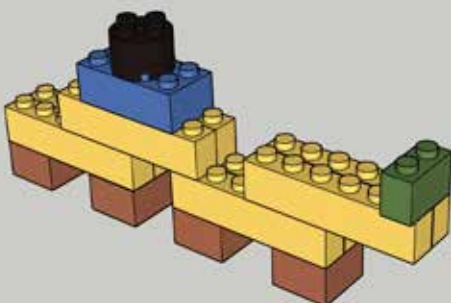
Lego Well

Page 2



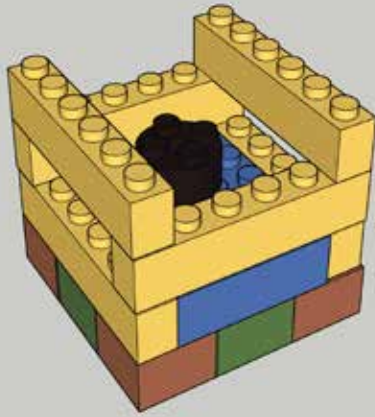
Lego Mailbox

Page 8



Lego Catapillar

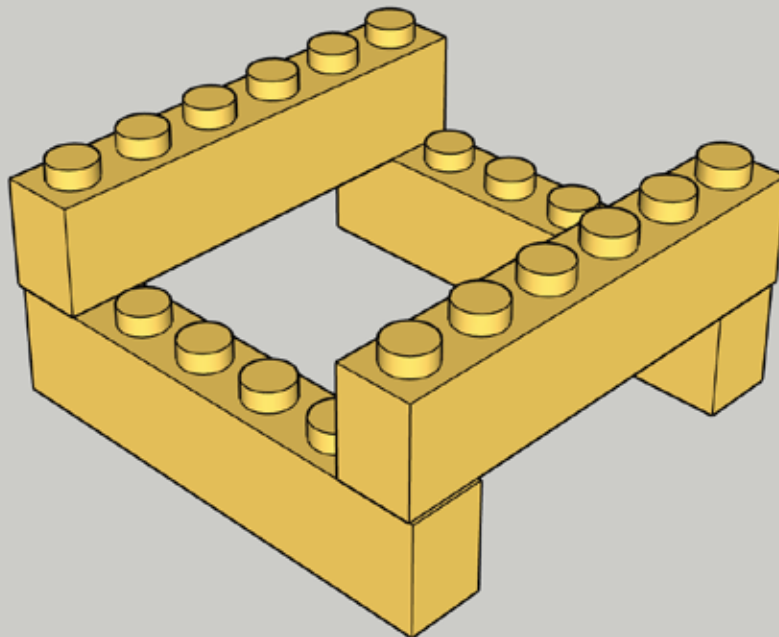
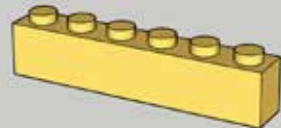
Page 13



Lego Well

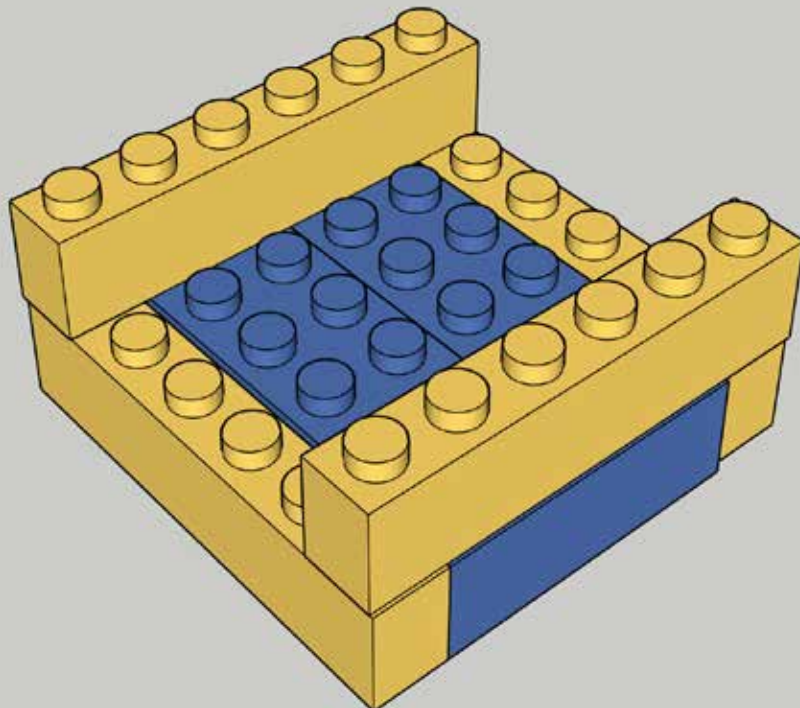
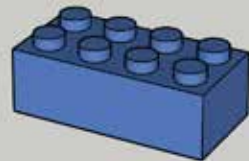
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x4



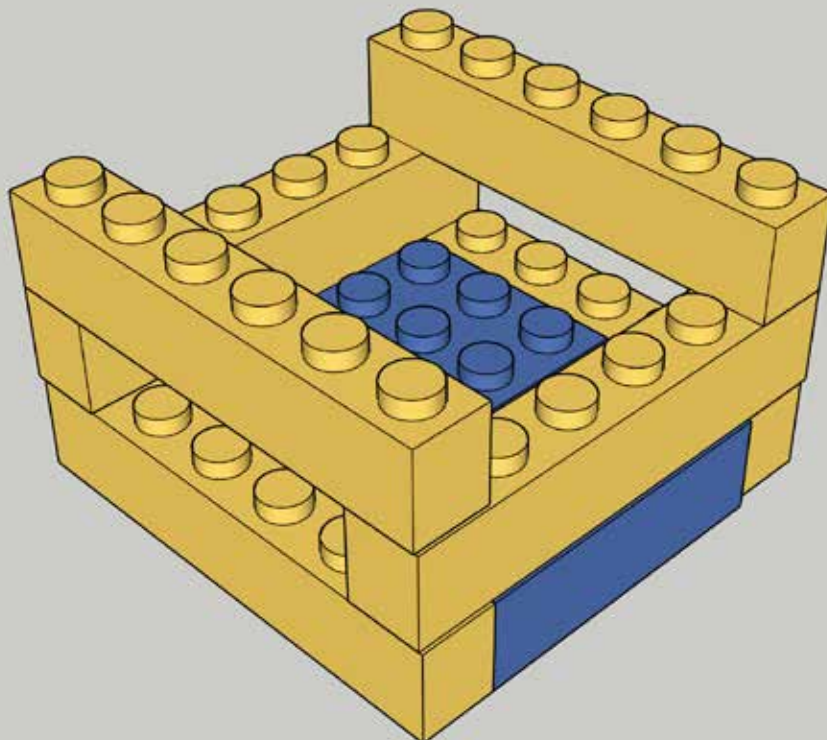
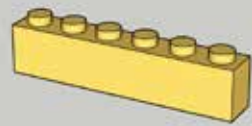
2

x2



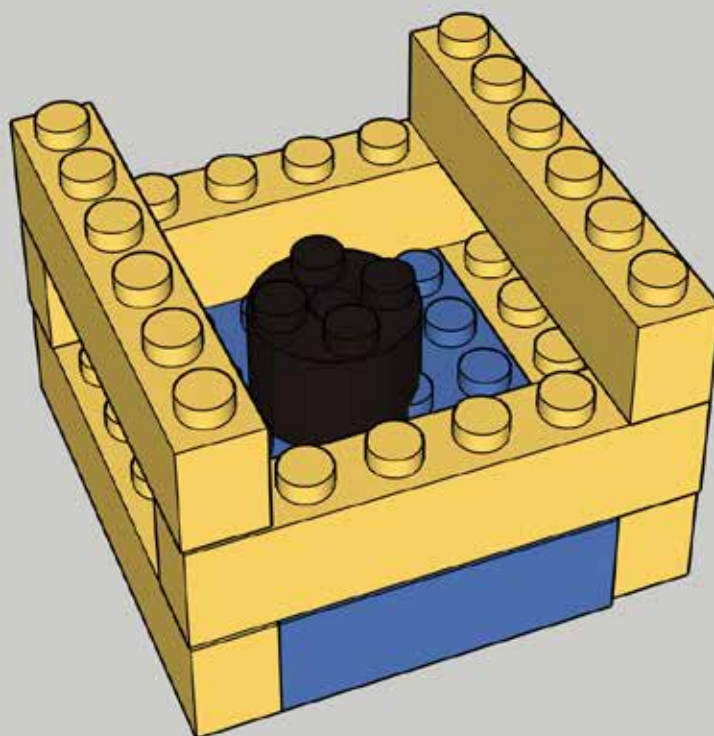
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x2



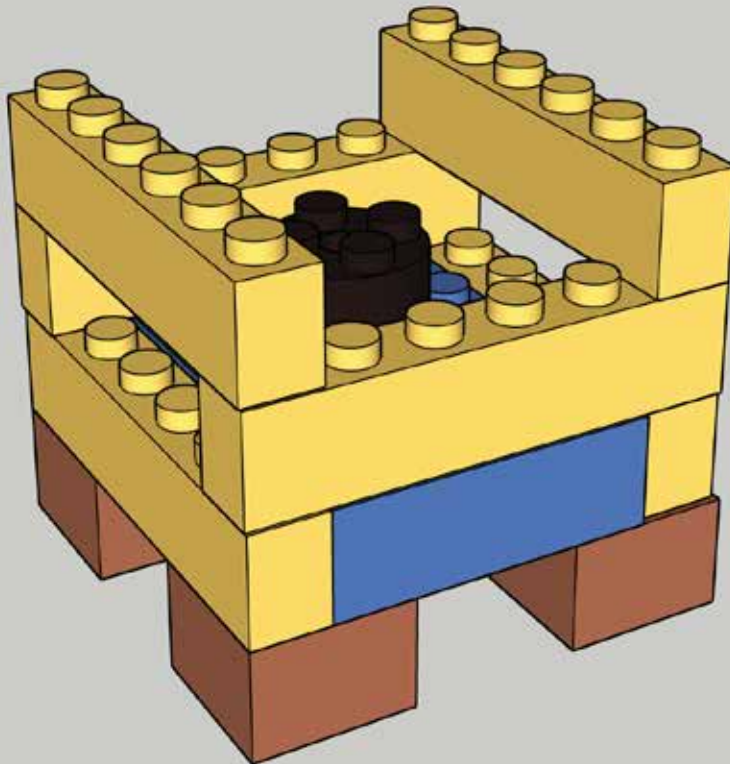
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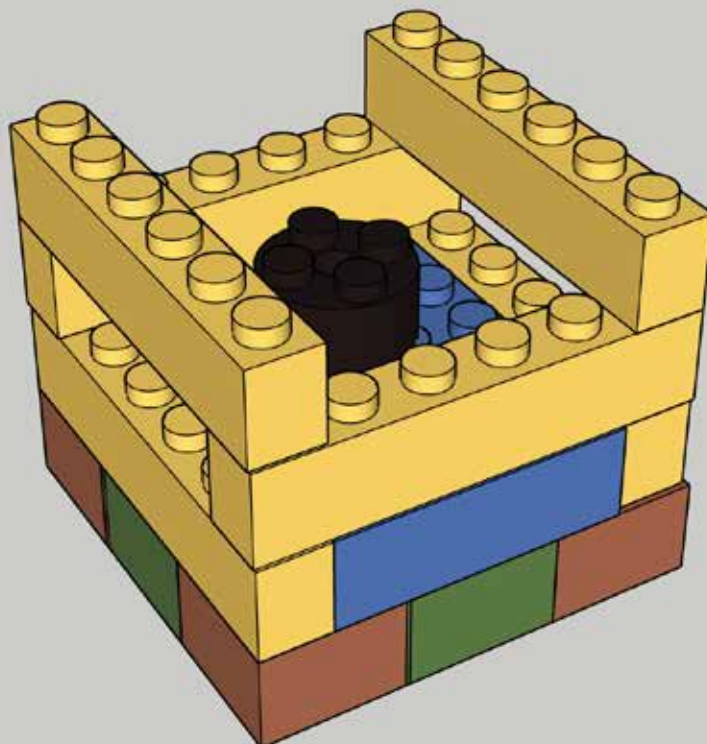
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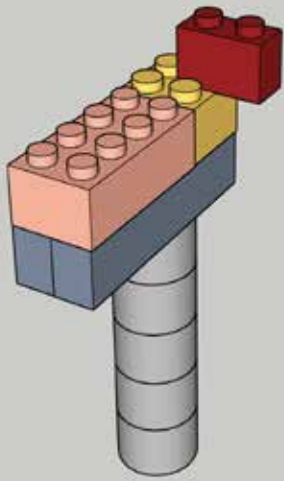
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6

x4

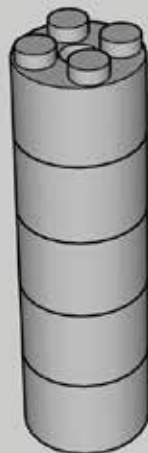




Lego Mailbox

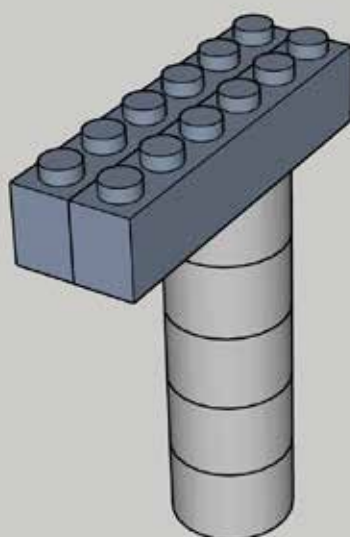
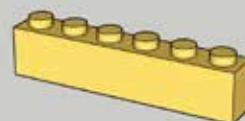
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x5



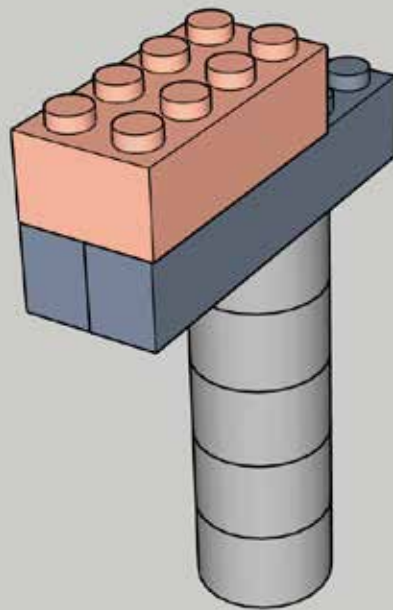
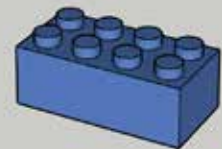
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x2



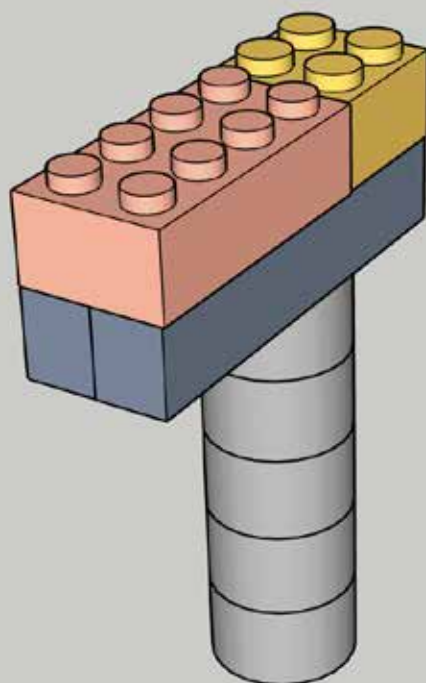
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x1



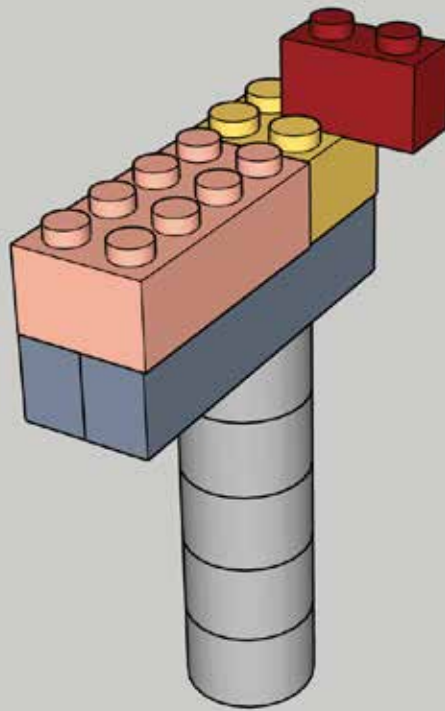
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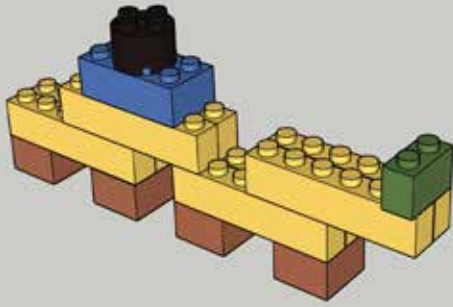
x1



5

x1

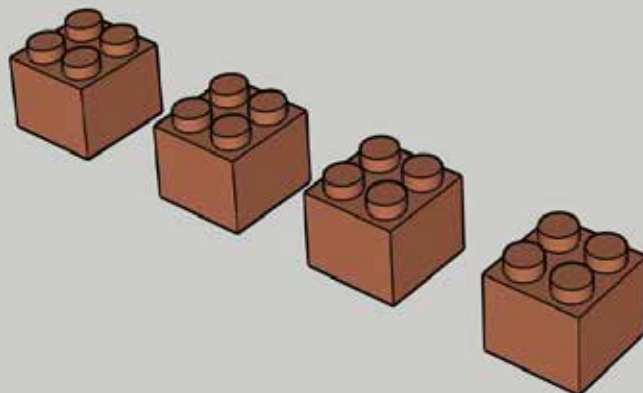




Lego Catapillar

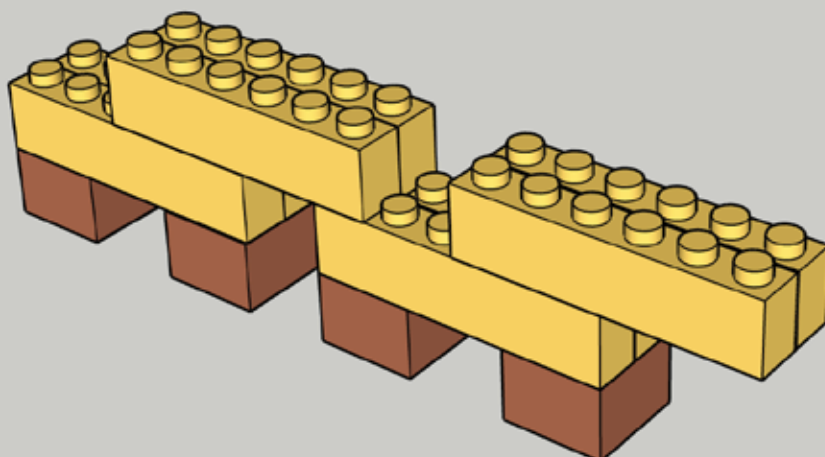
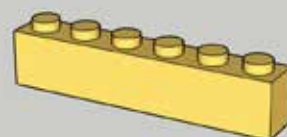
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x1



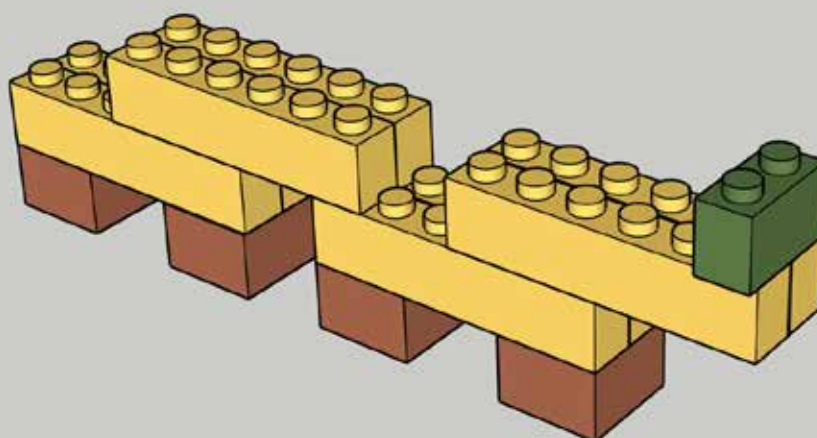
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x8



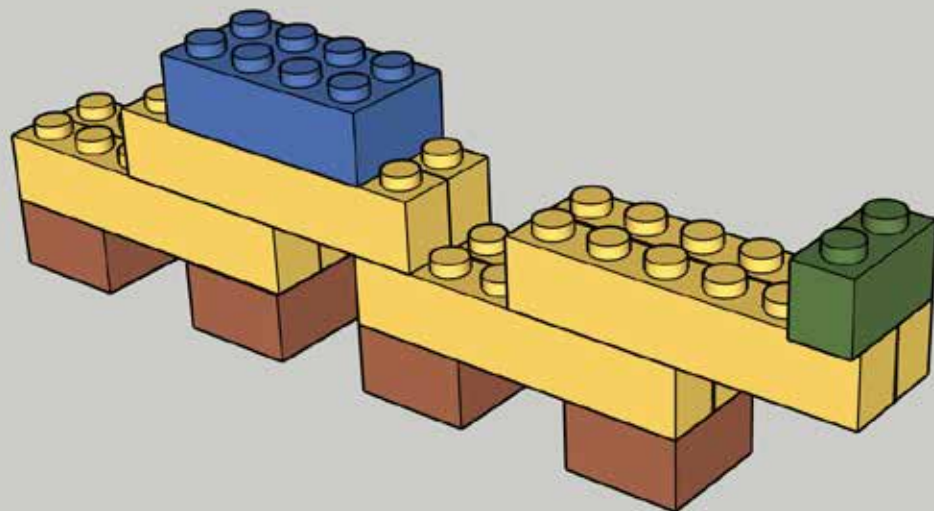
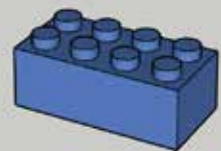
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x1



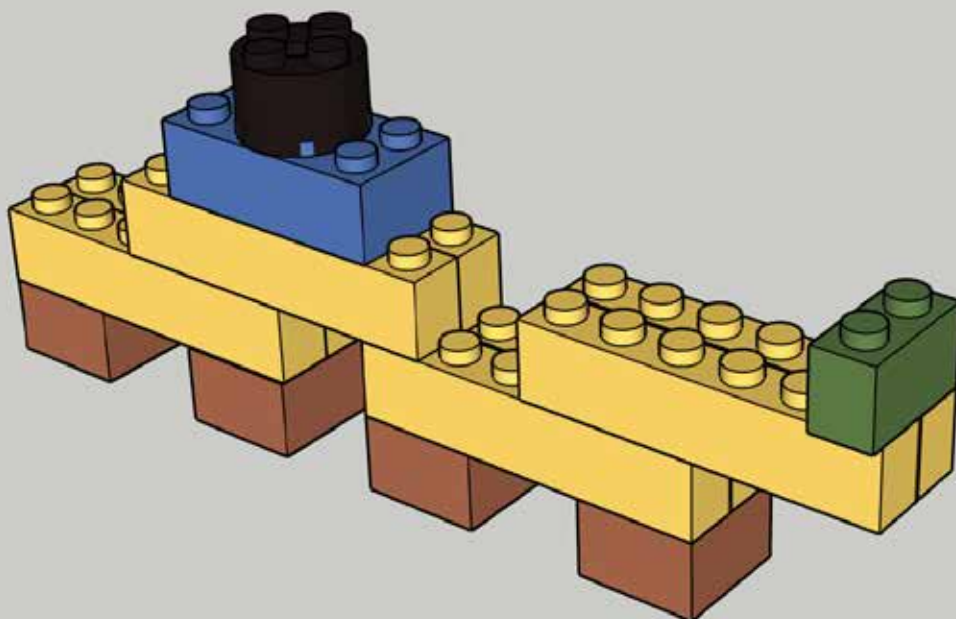
4

x1



5

x1

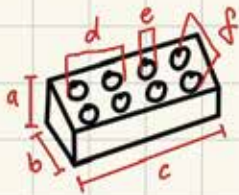


Notes / Journal

Drawing all of the pieces was much more time consuming than I expected. I've been setting it all up for like 2 hours so far & I haven't even started measuring the dimensions yet. I think I need to stop putting so much effort into the sketches. I was going to do all of the measuring of the Legos in the BTU Lab so I wouldn't have to buy a digital caliber, but I cared & bought one because I'm lazy & want to do it at home, which means that I have to wait until tomorrow to start getting the dimensions (Friday) and will probably be grinding this assignment ALL weekend. I also think that I'm going to try to use OnShape instead for this. Last week I used SketchUp for the 3D digital model of my bedroom, and it was so confusing & miserable to say the least. I used OnShape in my Engineering Projects class last year, & I was definitely more comfortable & knowledgeable on that application. I just hope I remember how to use it, so we'll see. If not, I'll buy the SketchUp Pro because it's pretty confusing to follow the demos in class on the free website version. It won't let me manually type the dimensions into the little box in the bottom right, so I have to be very precise while dragging on my track pad. Also totally didn't check which mouse I was buying, so now I have to order a dongle so it's compatible with my laptop. Nevermind, I'm going to use SketchUp I figured out how to use it. My digital caliber finally came & the measuring was very quick. Making them on SketchUp is a lot quicker & easier than I thought it would be. One of the hardest parts was coming up with something to build with the Legos. Setting up the PDF file is taking A LOT longer than expected. I am so happy to be done with this assignment.

Assignment 2: Make & Document Tiny Lego Sculptures

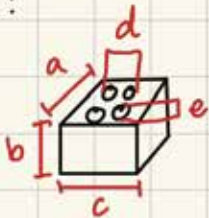
Piece 1:



- a: 9.5 mm
- b: 15.8 mm
- c: 31.7 mm
- d: 12.8 mm
- e: 4.8 mm
- f: 12.8 mm

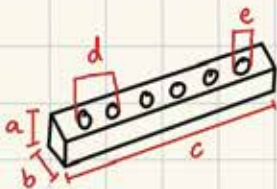
height with the studs is 11.3 mm,
so the height of a stud is 1.8 mm

Piece 2:



- a: 15.8 mm
- b: 9.5 mm
- c: 15.8 mm
- d: 12.8 mm
- e: 4.8 mm

Piece 3:



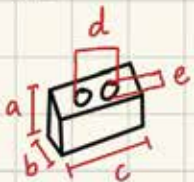
- a: 9.5 mm
- b: 7.7 mm
- c: 47.7 mm
- d: 12.8 mm
- e: 4.8 mm

Piece 5: Torus



- a: 9.5 mm
 - b: 15.8 mm
 - c: 4.7 mm
 - d: 12.7 mm
- outside diameter
inside diameter

Piece 4:



- a: 9.5 mm
- b: 7.9 mm
- c: 15.8 mm
- d: 12.8 mm
- e: 4.8 mm