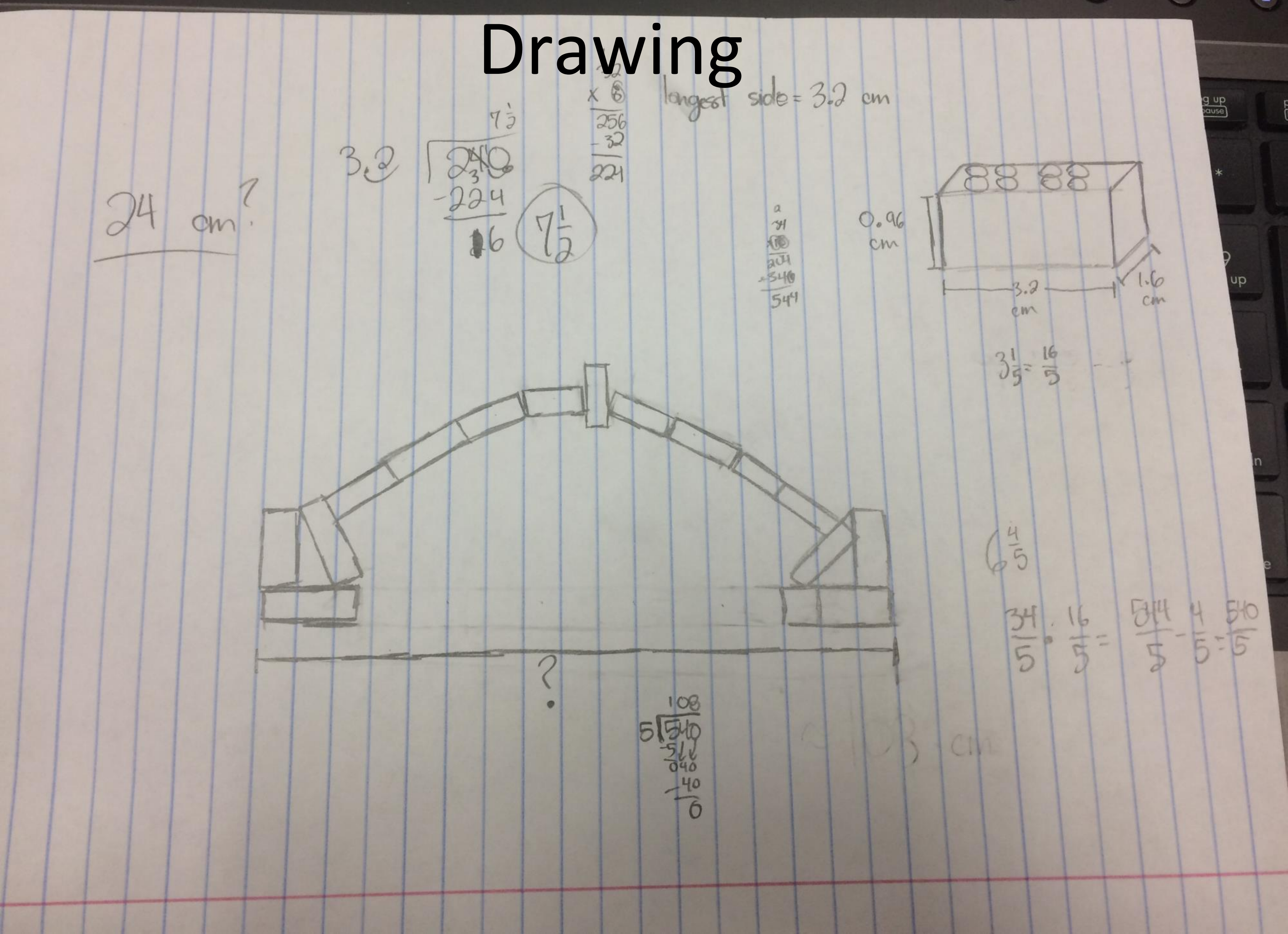
Arch Bridge Design Competition

Edgar, Lucas, Paul, Jess

Design

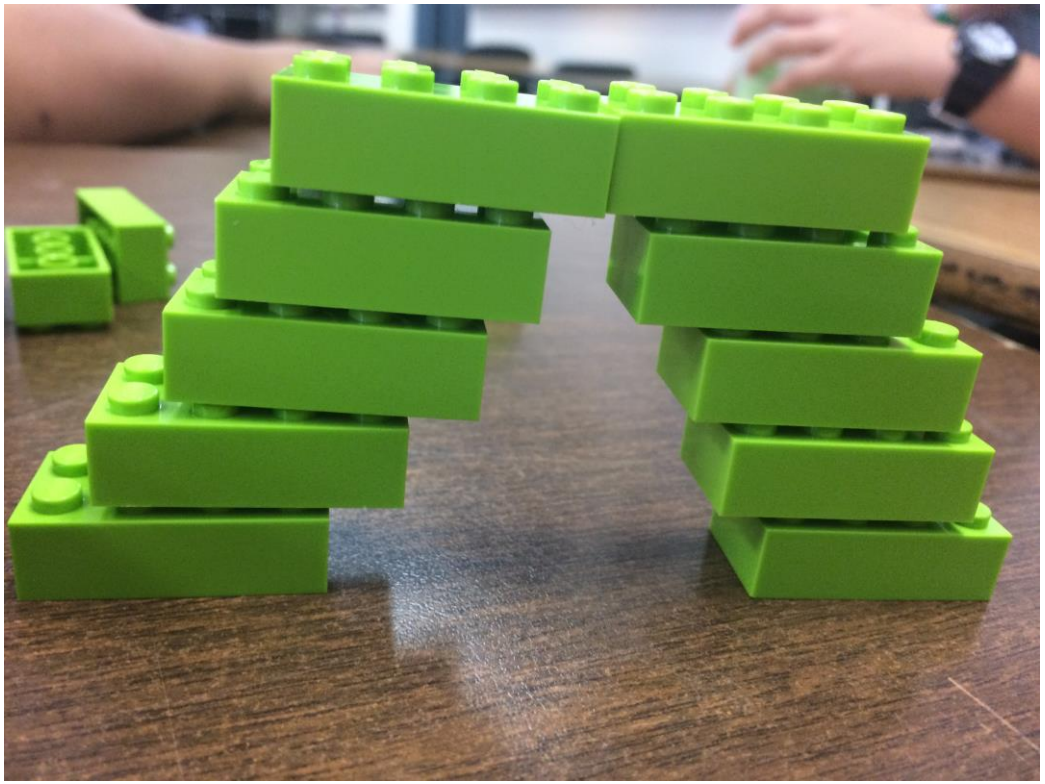
- We decided to use lego blocks. They were chosen for their shape and weight. Being small and plastic they don’t weigh very much, and because they are rectangular are easy to stack.
- Our predicted score was 7.5, an estimate from our drawing

Drawing



longest side = 3.2 cm
24 cm?
3.2 ⟌240
-224
16
7 1/2
256
-32
224
0.96 cm
3.2 cm
1.6 cm
3 1/5 = 16/5
?
6 4/5
5 ⟌540
108

Final Design



- Our bridge would have had a score of about 3.25 if it were up to code however we had a score of 0

Lessons Learned

- If we were to do it over again we would probably still use something that had flat surfaces like the legos
- However we have a lot we would change, we would choose a material that is able to create a little more friction as well as using a keystone, making it up to code