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Capstone write-up

For the capstone, we decided that using a material that was lightweight yet strong would be the best course of action: balsa, foamboard, etc. We thought this because we didn't want it to be difficult for the lifter to raise it up, but we did not want the grabber to crush it. We decided to go with foamboard because it was easier to work with (Fig. 1). We used a right-angle tool to perfectly measure the angles and lengths of each side, decreasing the room for human error.

We decided to model our capstone after the "lego" stones that the game uses, but only half of one (see Fig. 2). This was to cut down on the amount of work and material that we could need to use. After cutting out the sides of the cube -- and taping them together -- we discovered that it was not nearly strong enough and could fall apart from even just our hands. We also needed to cut out a hole at the bottom to allow our capstone play with the rest of the stones.

We then decided to add "nibs" to each of the sides which would allow the pieces to interlock with each other, strengthening the bonds between them (see Fig. 3).

Fig. 1

Fig. 2:

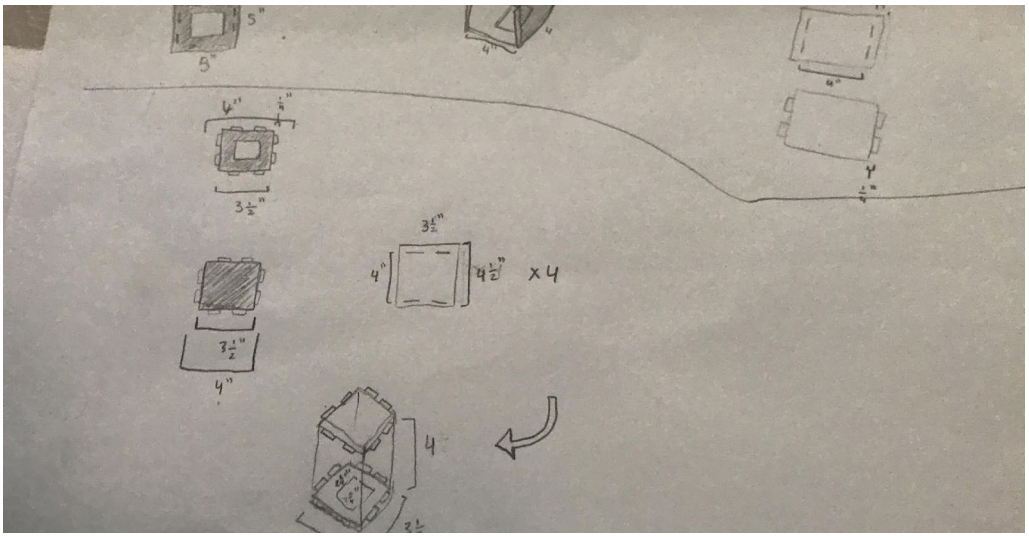

Fig. 3: