



STUDENT ASTRONAUT CHALLENGE 2024

AEROSPACE & ENGINEERING CLUB
SAGEMONT PREPARATORY SCHOOL



STUDENT MAILBOX DESIGN

By: Star Roar





Dr. Shaddel
Mr. Carlson
Jose Antonio Alicea
Nicholas Cushion
John Matheny
Eshan Peshimam
Maxx Rouca
Nicolas Sokolik
Maleke Thomas
Makalo Thomas
Jackson Weber

The Sagemont Prep Team



SAGEMONT PREP
STAR ROAR

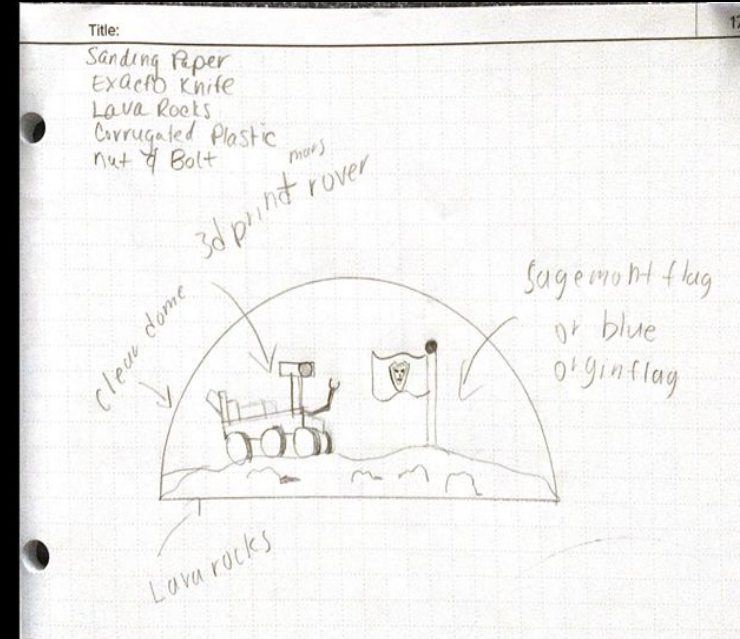
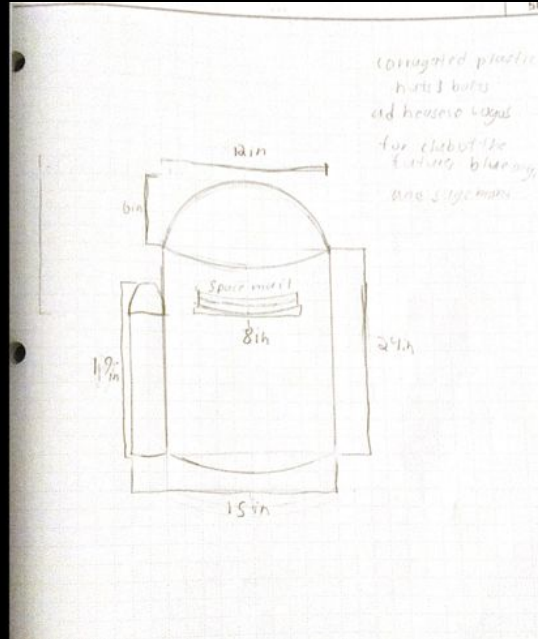


BLUE ORIGIN





These are the sketches we made when we were brainstorming ideas for the mailbox. Our theme for this year was Mars, so we considered adding Mars terrain to the design. In our original plan, we decided to include a rocket.





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Phase 2 – Decision and Materials

Our team decided on a cylindrical body for our mailbox, featuring a clear dome top with a Mars terrain inside and a New Shepard rocket on the side. There was a challenge with creating a cylindrical body. In the end we repurposed a common household item.





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Phase 3 – Building

After some testing and ordering materials, we went in to full gear, motivated to start the final construction of our mailbox. Following our carefully-examined plan, we progressively put together items and implemented ideas along the way. We made the Mars terrain using paper mache. We cut out the mail slot and holes where screws would be placed.





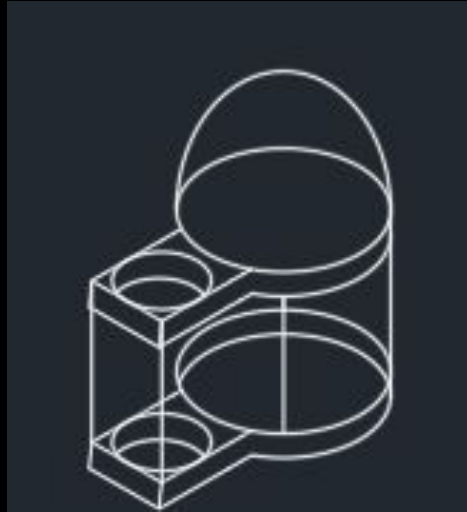
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Photo Gallery

Planning



Sketching



Drafting



Building

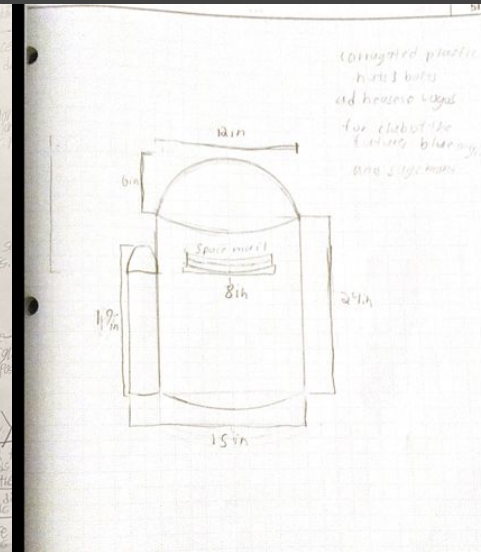
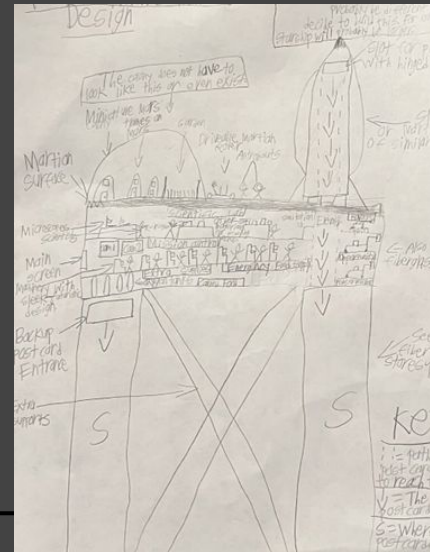


Planning





31" Height
15" Width



Drafting





Building



Q & A

At this time we will be taking questions.



THANK YOU FOR WATCHING THIS
PRESENTATION.
WE HOPE YOU ENJOYED IT!



JOSE ANTONIO ALICEA
MAKALO THOMAS - MAXX ROUCA