

Due to COVID and remote home learning the only qualifying game elements available to our team were the cylinders from this year's VEX IQ Challenge "Rise Above". Only one team member at a time had physical access to those VEX game elements.

Our Robotic Class was no longer in session as we worked. The only available communication with our instructor was by text. Team members had school issued iPads and a mix of personal devices and services. We used Discord text chat.

The game elements from the "Rise Above" challenge consisted of just two different VEX pieces. Rules state that entries must be constructed primarily from VEX game elements. For us adding any other material(s) would be an issue by any definition of "primarily". We decided to make our product solely out of the two eligible pieces we had.

Our product is a reconfigurable "Storage Kit" consisting of repurposed orange octagonal pieces and black connecting rods. These two pieces are from this year's "Rise Above" challenge. These are the only two eligible pieces we had available.

Reviewing the rules provided, we believe that our "Storage Kit" consisting of VEX Game Element pieces satisfies the contest rules. Our kit can be configured in three basic designs: vertical stand, horizontal shelf, and open rack. We have shown the actual multipurpose usefulness of our kit in the home and classroom in our video.

We initially listed ideas on how we could reconfigure and repurpose the available quantities of our two pieces.

Book Rack

COVID Mask Holder

DVD Holder

External Hard Drive Stand

Kitchen Utensil Holders

Light Bulb Holder

Mail Sorter

Multipurpose Shelf

Paint Brush Rack

Pet Bowl Stand

Plant Stand

Test Tube Stand

Thread Spool Holder

Toilet Paper Holder

Video Game Organizer

Wire Spool Holder



As we built our ideas the better idea of our product being a multipurpose kit rather than a single item came about. We realized a “**Storage Kit**” was much more useful than any single product. A visual text free instruction manual similar to Legos would be provided with our product. See below.



We used pictures, not sketches, in discussing our designs. Building our ideas: the DVD holder was excellent, the test tube rack practical, the pet bowl stand failed, the mail sorter failed, and the toilet paper holder was fun. Many of the most unique and practical ideas made it into our submission video. We scripted our video similar to a late night product commercial, like Flex Seal, where one product has many very practical uses.

Handling large media files was an issue. The software used in video production was: Airdrop for transferring files between Apple devices, Videoleap for all video editing on an iPhone 6, and the YouTube app for uploading the final video. Videoleap allowed us to edit video by segments, add audio layers, and add text credits.

Because we were not physically together and had severely limited resources, we made do in a difficult situation and completed our entry.

Video Link: <https://www.youtube.com/watch?v=zujRaZuiGCg>