

# Vex Recycling Online Challenge

## Team 6008A

The A-Team

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### Sensory Table



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## Concept

We initially started with design concepts for something that would, not only implement as many recycled Vex game elements as possible but also impact the lives of others. We wanted to reach beyond just a functional design and touch the lives of other students. After brainstorming different ideas, we actually chose the who before the what! We wished to create something for the special needs unit at our elementary school. Now that we had the who, we needed design ideas for the what. Many days and ideas later.....we agreed we would create a sensory table for these amazing kids.

## Design

After some research, we sketched our initial design to focus on various sensory and motor skills. We pulled together Vex VRC game elements spanning over seven years of games to complete this challenge. Our goal was to use as many Vex parts as possible to create our sensory table. The main part of the design of the table would include the use of Vex pvc pipes, balls, barrels, rings and stars to achieve the sensory and motor skill activities. Within our design we needed to insure the table was ADA wheelchair accessible.

## Construction

The build began with a recycled piece of 24" by 48" MDF for our tabletop. Our next step was to determine the measurements to make our table ADA wheelchair accessible. We obtained 4 rails from the Vex VRC Toss Up game to use as our table legs. We decided to cut sections of the rail to bend for feet and for a point of contact to the table. Then we used liquid nails and screws to fasten the legs to the table top. The next step, was to begin cutting out our holes for our ball pass-throughs and the pvc pipes. At this point, we cut our pvc pipes and attached them with liquid nails and screws. From there, we attached our Skyrise peg holder and the Gateway barrel to the tabletop with screws. Now it's time to shift the focus to under the table, we utilized three plastic Sack Attack troughs to function as ball ramps. The first ramp consisted of one full

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trough on its original Vex platform, with another trough cut and attached to prevent ball spillage. The second ramp, the plastic trough was suspended underneath the table, at an angle to produce the ramp. Now, we needed to explore our sewing skills! We seam ripped the top of three Vex Starstruck orange cubes and pulled out the batting. Stitched the sides for a nicer edge and inserted a basket, plastic storage container, and recycled Vex box into the cubes. These Vex Starstruck cubes will now serve as our ball catchers!! We had reached the end of our build and now its Sensory time!

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# Parts List



Skyrise-pvc



Gateway-barrel



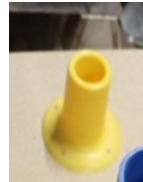
Round Up-Rings



Starstruck-star



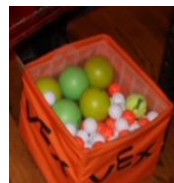
Gateway-ball



Skyrise-peg holder



Toss Up-hex ball



Starstruck- Cube



Sack Attack- Troughs





Swept Away- football



Swept Away-soccer



Starstruck- pvc



Toss Up- Rails



Nothing but Net-ball

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## Sketch/Plans

