# Repurpose Challenge: Carnival Games

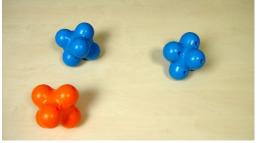
Green Tigers Team 10142Z

We repurposed Vex IQ pieces by making carnival games. We decided to make the carnival games to encourage good behavior in the classroom. Students can play the games when they are good as a reward. After we were done making it the preschoolers at our school got to try it out.



### **Pieces**

The pieces we used were the Hubs from Next level, PVC Pipe and Rings from Ringmaster, Vex Balls from Bank shot and from squared away, Hex Balls from Cross Over, and the Donut rings from Rings-n-Things.



Hex Balls from Cross Over



Hub from Next Level



Vex Balls from Bank Shot and Squared Away



Rings from Ring Master



Donut Rings from Rings-n-Things

#### **Ball Toss**

The first game we made was Ball toss. Our first design was just hubs all scattered around floor and people could not figure out how to set it up. If the hubs got knocked over they didn't know where to put it back. We changed that by adding paper with markings for the hubs. We also we had walls around it but we didn't need them so we took them off.



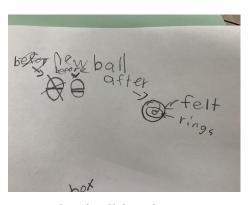
The completed game

#### **Hub Knock Down**

One of the games we made was Ball Throw. The first design was just 2 shoe boxes stacked on top of each other and the item to throw was orange balls. Next we added tape to the box because it kept falling down and it was troublesome to keep putting it back. Another change we made was instead of balls we chose one rings. The balls weren't heavy enough and actually broke when they were thrown. We then tried 1 ring but then it wasn't heavy enough so we tried two rings together. We then wrapped the two rings in felt and added a couple of rubber bands to make it safer to throw.



Our idea



The ball broke so we used rings



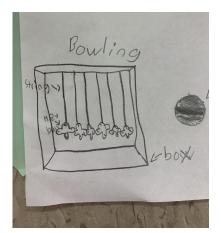
Felt ring



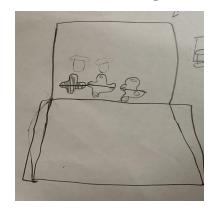
Completed game

## **Bowling**

We next added a game called bowling. The first design was without a ramp and we had full hex balls hanging from strings. We added a ramp because we needed to make something that kids could roll easier and it added some speed as the ball rolled. We changed the pin design because it would not fall over the string attached to it. Instead we just used half hex balls because they can be knocked on its side.



Our first design



Our 2nd design



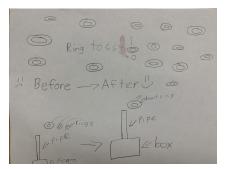
Our 1st prototype



Our final game

## **Ring Toss**

The last game we made was Ring Toss. The first model was the pvc pipe duct-taped to foam. We used rings from Ringmaster to throw on the pipe. It was very difficult to get them on. We tried the big rings and it was easier. The problem was every time the ring hit the pole, the pole fell down. We added a larger shoebox outside the foam. That added more stability so it wouldn't fall over. Finally, we added a paper with a line on the floor so kids know where to stand.



Our first design



Trying with rings



Our complete game

#### **Preschoolers have Fun**

After making all of our carnival games we let the preschoolers at our school play them. They had a lot of fun! We were happy to repurpose vex game elements into something useful for the preschoolers to play.





