

Engineering/Technology - Carnival Tycoon Challenge

Design Challenge:

Carnival ride operators have asked for a better way to return the rafts from the end of the 'River Rapids' ride back to a holding tank. Using the pneumatic catapult, students must re-design the end effector or 'cradle' to launch these rafts back into the holding tank efficiently at the end of the day. Students must draw their designs, fabricate prototypes using folded card stock, and test their designs using proper experimental procedures. Students must present their designs at a final design review.



DEPCO Enterprises, LLC

AMP IT UP KIT



Design Challenge -13 Days

- Day 1: 2D-3D, Layers, Nets-Conventions
- Day 2: Brief Intro to Catapult Challenge
- Day 3: Engineering Design
- Day 4: Problem Definition
- Day 5: Market Research
- Day 6: EDP Process Log
- Day 7: Concept Evaluation
- Day 8: Prototyping & Iteration:
- Day 9: Reminder of Expectations
- Day 10: Final Report
- Day 11: Final Reminders
- Day 12: Final Reminders
- Day 13: Final Presentation