

Robots: At the Carnival

Design Brief: Elementary School, Middle School, High School

Challenge:

Build a robot that uses Raspberry Pi or microcontroller technology to perform tasks commonly seen in amusement parks. These tasks may involve popping balloons, moving rings and driving in autonomous mode on various tracks within a specific time frame. Teams will chronicle the Engineering Design Process via a new Video Portfolio (v-Portfolio) process.

Background

After-school robotics clubs have become a place for students, teachers and our community volunteers to share good times discovering new ideas and possibilities. Students and teachers develop problem-solving skills and new ways of understanding technological concepts like coding and engineering design. While academic excellence is a priority of VBCPS we also want our kids to have FUN! When we create an atmosphere where students can have fun learning we create an incubator for creativity and problem-solving. Students test their ideas without inhibition or judgment. This freedom frequently leads to innovative ideas and breakthrough thinking. Award-winning Disney producer Don Hahn says, “play is the welcome cousin of creativity.”



For the past few years our robotics competitions have become a new form of entertainment for our students, staff and their families. Our STEM Trifecta has had exhibitions, a STEM playground and a variety of community-based activities that have fostered new ideas and creativity in our youth. With this in mind, we are looking forward to another great year where we can introduce new concepts and have fun teaching and learning.