



Challenge #3

Robotics Curriculum
IT Adventures



Pong

DETAILS

Construct a robot to autonomously launch ping pong balls into a group of cups. Your robot will be loaded with 10 balls to fling, hit or throw into the 10 separate cups marked with numbers. After all 10 balls have been launched, you will be awarded the number of points indicated on any cups that have a ball in them.



RULES

- The robot must stay within the shooting zone marked on the floor
- The ball must come to rest in the cup to collect the points for that individual cup, so no points if it bounces out or gets knocked out by another ball
- The balls may bounce into the cups
- You can only collect the points for a cup once, even if multiple balls are in that cup at completion
- Your robot is limited to only kit parts from a single kit set and human interaction is allowed only to load the robot (if no loading mechanism is added)

SCORING

___ / 22 cup point total

___ / 15 launcher design

___ / 10 launches all balls

___ / 10 system stability

___ / 3 all cup bonus

___ / 10 Ball feeding system

___ / 20 creativity

___ / 10 runs autonomously

(outside of loading)