Robo-Balloon Attack

For this challenge you will be asked to construct a robot that can navigate around an arena while attempting to pop your opponent's balloon.

Rules and Details:

1. **The Arena** will be a rectangular area on the classroom floor that has been marked off with **black** electrical tape.
2. Your robot must stay within the marked area for the duration of your match. If all parts of your robot appear to be outside of the area marked *on more than one occasion*, your opponent is awarded the win.
3. Each Robot will start the match on designated points in the arena. The robots must begin the match facing each other.
4. The judges will attach two balloons to your robot. The balloons will be taped directly to the robot (no string).
5. Both balloons must be deemed accessible by the judges. You cannot create a "shield" or "cage" to protect your balloon. It must be accessible from all sides and the top of the balloon.
6. **Match rules**: 3 minute matches. Team that breaks *both* opponents balloons first or burst more of the opponents balloons wins. If an equal amount of balloons have been broken a tie will be awarded.
7. **Tournament rules**: Each team will get 5 official matches. This will allow students to **make adjustment** and **refine strategies**. 3 points for a win, 1 point for a loss, and 2 points for a tie. Team with the most points at the end of the tournament wins the Balloon Battle CUP 2020! Have fun!

The Arena

ENGINEERING DESIGN PROCESS

ASK

IMAGINE

IMPROVE

Try it out!

PLAN