# Challenge #4: Robot Soccer – Remote Control!

(Score based on Battle Performance)

#### Goal:

Students will use their smart phones and/or iPads in order to direct their robots to transport more balls into a goal than their opponents.

### Purpose:

Fun!

### Teams:

The class will be broken into an equal number of teams. These teams will come up with a strategy that will allow them to maximize the number of balls they transport. Eg: Do all team robots transport balls or do some of the team robots block other teams from transporting balls.

## **Guidelines:**

- Teams will start on any side of the soccer square and have to transport their balls into the goals on any side of the square.
- Each team will be given a ball that they can start with. There will also be a pile of balls ٠ in the center of the course that any robot can get and transport to their goal. Orange ball are worth 1 pt. and white balls are worth 5 points.
- Once a ball enters a goal area, it is considered a score, even if it rolls back out. ٠ Instructor will demonstrate what "Entering A Goal Area" is prior to the game beginning.
- Robots are allowed to clash.

## Scoring:

There will be a total of 5 rounds. Each round, the players will be given a score:

Winner = 100 pts.2nd Place = 90 pts. $3^{rd}$  Place = 80 pts.  $4^{\text{th}}$  Place = 70 pts. 5<sup>th</sup> Place 60 pts.  $6^{\text{th}}$  Place = 50 pts.

At the end of the five rounds, the scores for each team will be added up and divided by 5. That score will determine placement and grade.

**Note**: No rules are hard and fast...these guidelines will constantly morph from student input to make a more exciting game.











