**Robot Design Sample Challenges**

This is an introduction to how to work on a challenge with the robot as a team. Students can make up their own challenges, or you can assign them a challenge.

Students should do these tasks with a team and use the robot design rubrics as an assessment of how well they did on each task.

Here is the robot design rubric: <http://www.firstlegoleague.org/sites/default/files/combined-rubrics-2015.pdf>

1. Choose a chorus of a song and coordinate the movements of two robots to dance to the chorus.
2. Design the robot in such a way that it will project an item across the room. Compete to see which robot can throw the farthest.
3. Design a robot that can move without wheels. Use linkages as part of your design.
4. Compose a robot song with two robots that harmonize with one another.
5. Have your robot solve a maze using the ultrasonic sensor or IR sensor.