

Team Members _____

INTRODUCE

Write the challenge in your own words. Record the constraints you should follow, the materials that can be used for the solution, and what the testing field will look like.

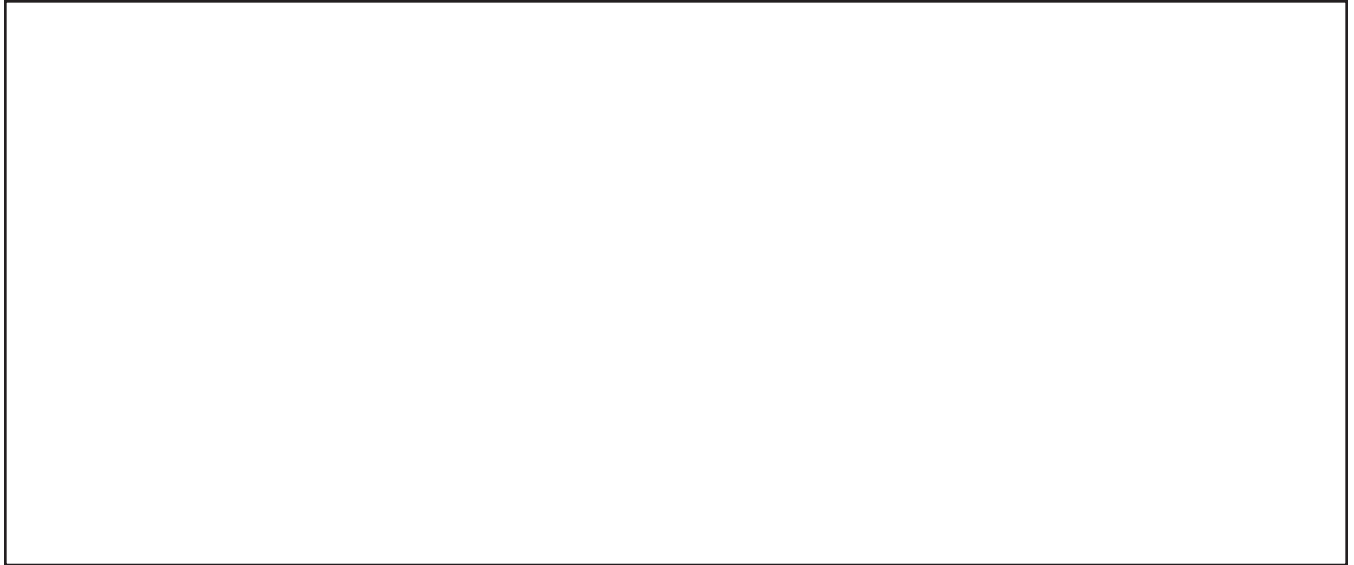
Challenge

Constraints

Materials and Field

BRAINSTORM

Create quick sketches and describe solutions to the challenge. Use additional pages as needed.



Description



Description

PLAN

Create a detailed sketch of your selected solution to the challenge. Label the materials you will use. A bill of materials and technical drawings could be substituted. Pictures and assembly instructions can also be added.

Detailed Sketch

TEST

Note how testing was conducted. Create a table to document your results. Graph or analyze your data. Record your observations of how your robot performed.

Observations

REFINE

Document changes made to your robot and the steps it follows. Why were modifications made? How might further modifications be made to improve the robot's performance?

IMPROVE

Document how you could improve your robot. Sketch your proposed modifications and changes and write a description of how you think these changes will improve your robot.

Sketch



Description

CHECKLIST

Use this checklist to make sure you've completed each step of the engineering process.

	Student
INTRODUCE	
<ul style="list-style-type: none"> • Challenge • Constraints • Materials and field 	
BRAINSTORM	
<ul style="list-style-type: none"> • Sketches • Descriptions 	
PLAN and CREATE	
<ul style="list-style-type: none"> • Detailed sketch • Detailed description 	
STEPS	
TEST	
<ul style="list-style-type: none"> • Table • Data analysis • Observations 	
REFINE	
IMPROVE	
<ul style="list-style-type: none"> • Sketch • Description 	
EVALUATE	
REFLECT	