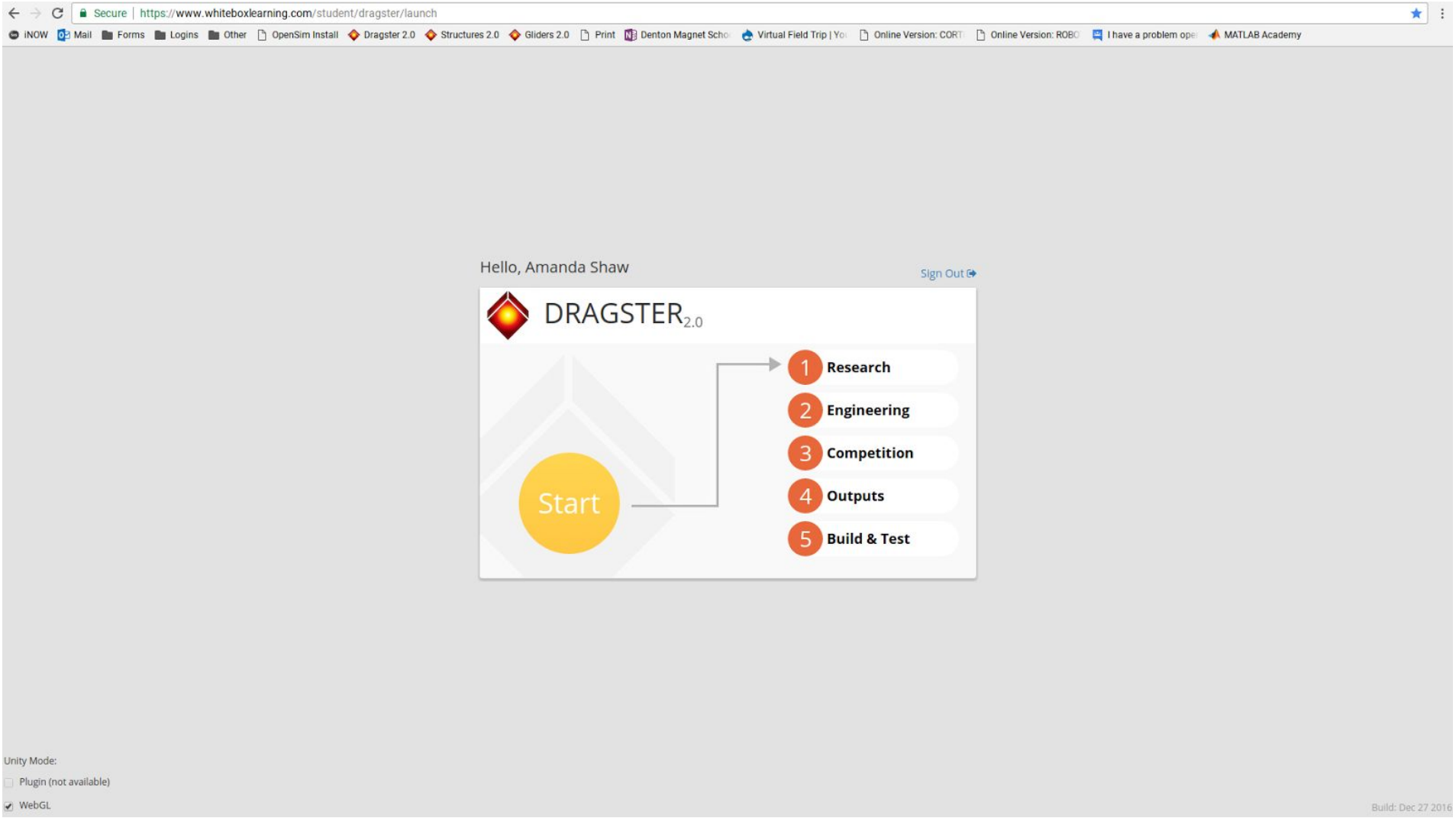
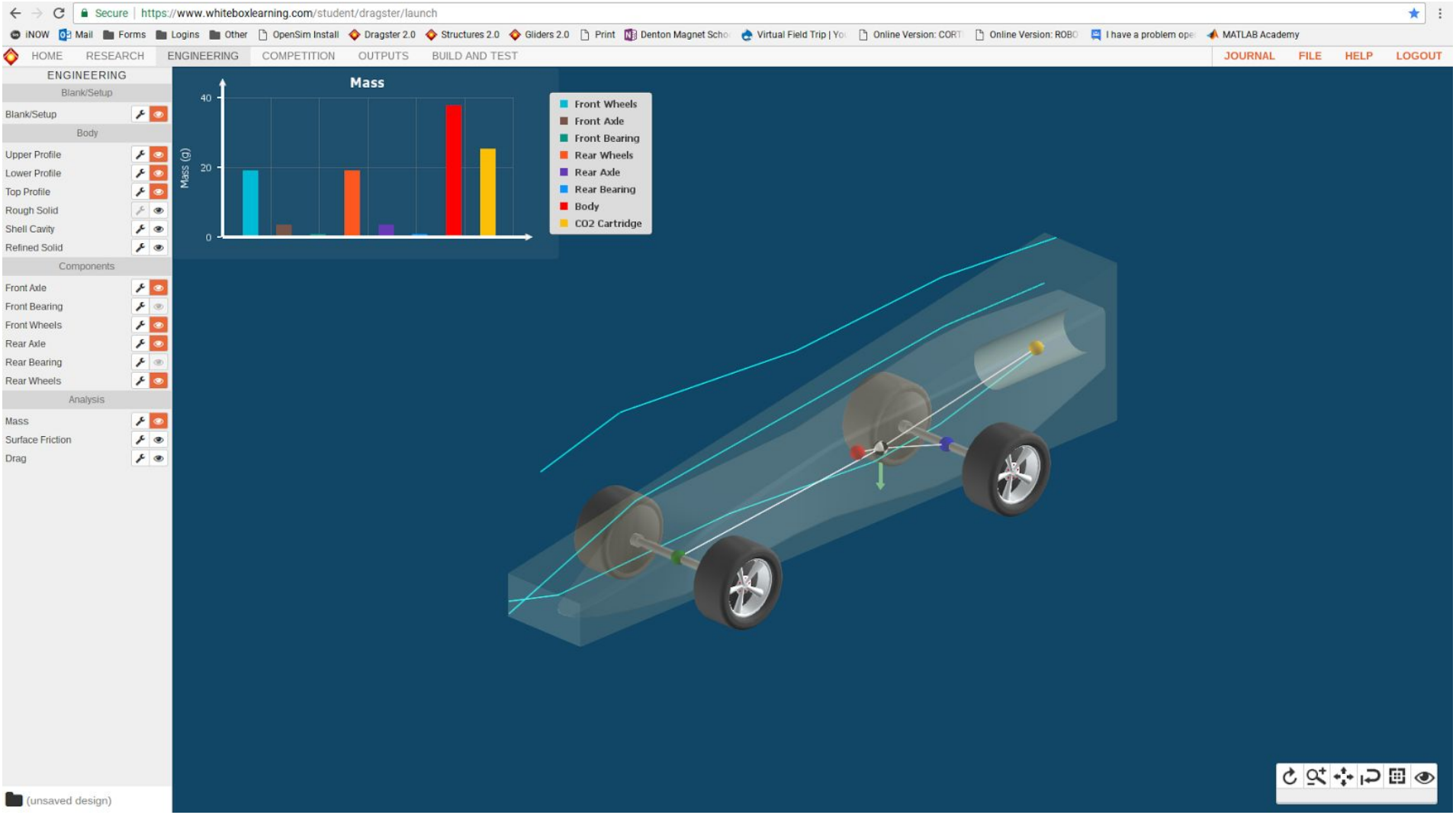

Secure | https://www.whiteboxlearning.com/student/dragster/launch
iNOW
Mail
Forms
Logins
Other
OpenSim Install
Dragster 2.0
Structures 2.0
Gliders 2.0
Print
Virtual Field Trip | Yo
Online Version: CORT
Online Version: ROBO
I have a problem ope
MATLAB Academy
Hello, Amanda Shaw
Sign Out
DRAGSTER2.0
Start
1 Research
2 Engineering
3 Competition
4 Outputs
5 Build & Test
Unity Mode:
Plugin (not available)
WebGL
Build: Dec 27 2016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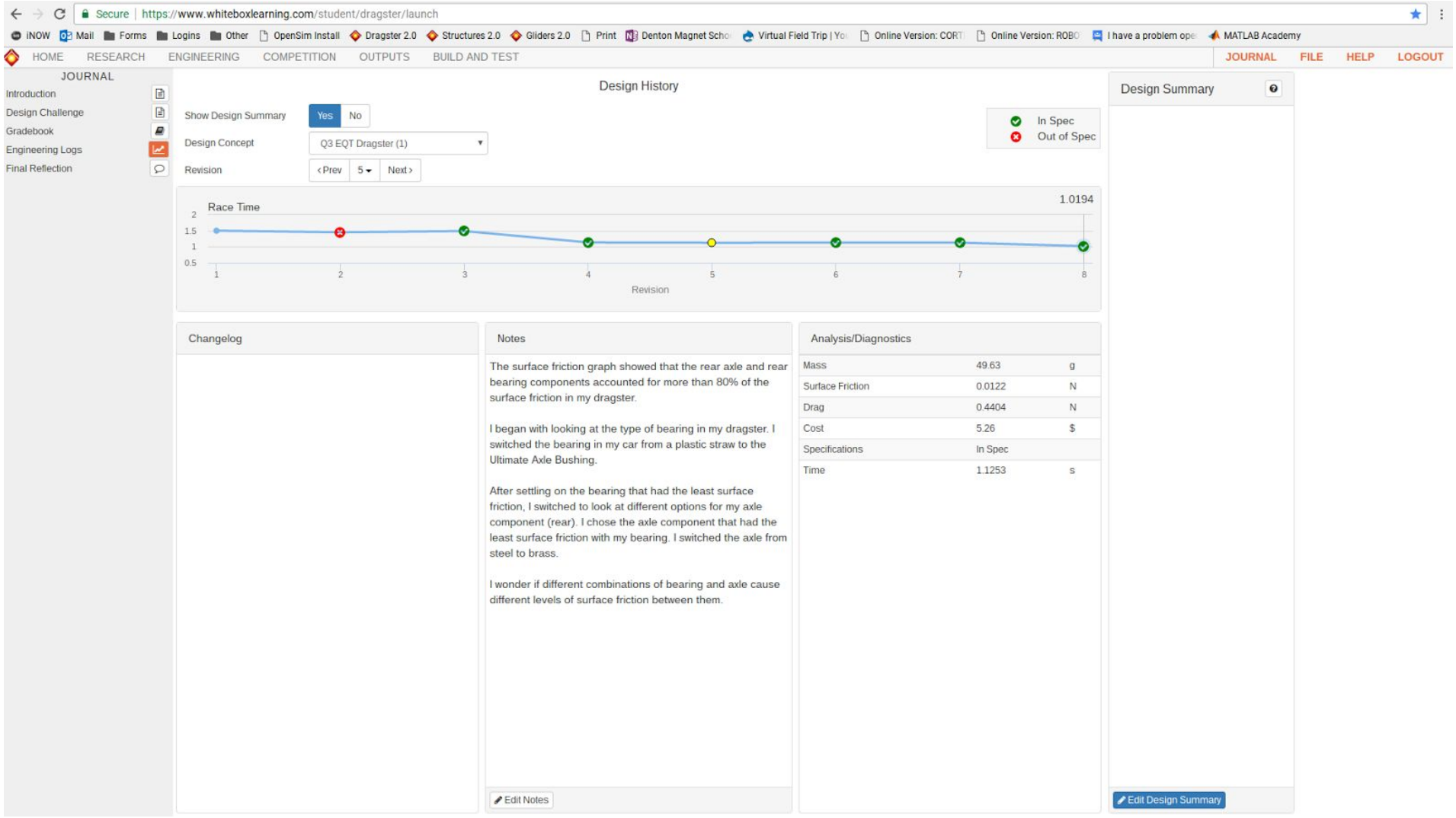
Virtual Field Trip | Yo
Online Version: CORT
Online Version: ROBO
I have a problem ope
MATLAB Academy
HOME
RESEARCH
ENGINEERING
COMPETITION
OUTPUTS
BUILD AND TEST
JOURNAL
FILE
HELP
LOGOUT
ENGINEERING
Blank/Setup
Blank/Setup
Body
Upper Profile
Lower Profile
Top Profile
Rough Solid
Shell Cavity
Refined Solid
Components
Front Axle
Front Bearing
Front Wheels
Rear Axle
Rear Bearing
Rear Wheels
Analysis
Mass
Surface Friction
Drag
(unsaved design)
Mass
Mass (g)
40
20
0
Front Wheels
Front Axle
Front Bearing
Rear Wheels
Rear Axle
Rear Bearing
Body
CO2 Cartridge


Secure | https://www.whiteboxlearning.com/student/dragster/launch
HOME RESEARCH ENGINEERING COMPETITION OUTPUTS BUILD AND TEST
JOURNAL FILE HELP LOGOUT
JOURNAL
Introduction
Design Challenge
Gradebook
Engineering Logs
Final Reflection
Design History
Show Design Summary
Yes
No
Design Concept
Q3 EQT Dragster (1)
Revision
‹ Prev
5
Next ›
In Spec
Out of Spec
Race Time
1.0194
2
1.5
1
0.5
1
2
3
4
5
6
7
8
Revision
Design Summary
Changelog
Notes
The surface friction graph showed that the rear axle and rear bearing components accounted for more than 80% of the surface friction in my dragster.
I began with looking at the type of bearing in my dragster. I switched the bearing in my car from a plastic straw to the Ultimate Axle Bushing.
After settling on the bearing that had the least surface friction, I switched to look at different options for my axle component (rear). I chose the axle component that had the least surface friction with my bearing. I switched the axle from steel to brass.
I wonder if different combinations of bearing and axle cause different levels of surface friction between them.
Edit Notes
Analysis/Diagnostics
Mass 49.63 g
Surface Friction 0.0122 N
Drag 0.4404 N
Cost 5.26 $
Specifications In Spec
Time 1.1253 s
Edit Design Summary

Secure | https://classroom.google.com/c/MjI1NzA2ODU2OVpa

iNOW Mail Forms Logins Other OpenSim Install Dragster 2.0 Structures 2.0 Gliders 2.0 Print Denton Magnet Scho Virtual Field Trip | Yo Online Version: CORT Online Version: ROBO I have a problem ope MATLAB Academy

PLTW
2016 - 2017

STREAM STUDENTS ABOUT ashaw@mcpss.com

Amanda Shaw
Mar 10

Whitebox

48 DONE

50 NOT DONE

Due Mar 10

Use data to explain how you have improved your engineering design.

This assignment is for a major assessment grade. Remember to include all required parts of technical writing that we discussed in our lesson and in our student-teacher conferences. You will be graded using the same rubric we used in our writing conferences (attached below).

Technical Writing
Google Slides

Technical Writing Rubric
Google Docs

Add class comment...

Amanda Shaw
Mar 10

Bellwork

(Bellwork Week 9, Friday 3/10) What steps are important to include in technical writing? Why?

Remember to turn in your bell work today for a grade.

Add class comment