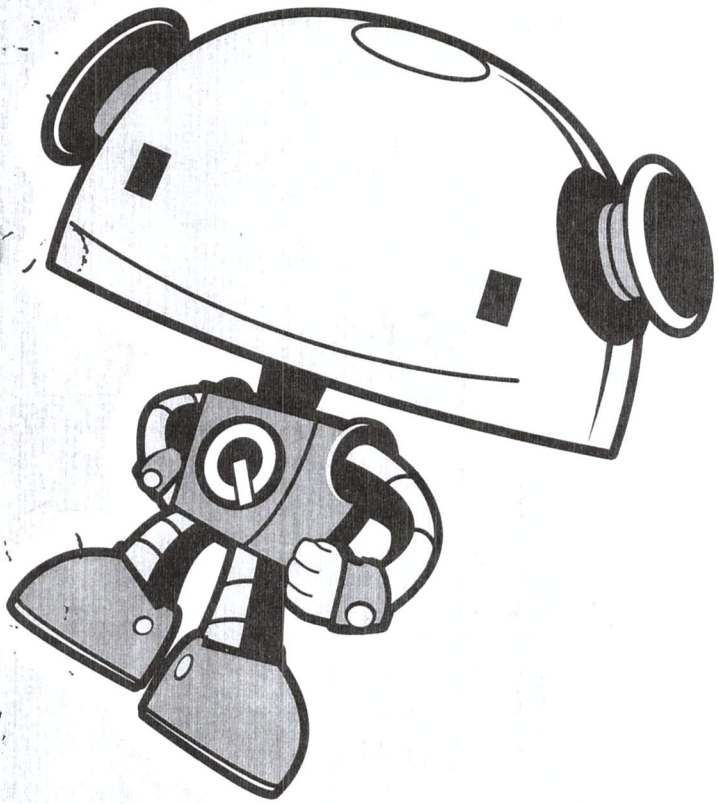


team number: 13485A

team name: C.M.S

school: M.S

start date: 10/1/2021

end date: 5/13/2022

GEARING UP FOR SUCCESS

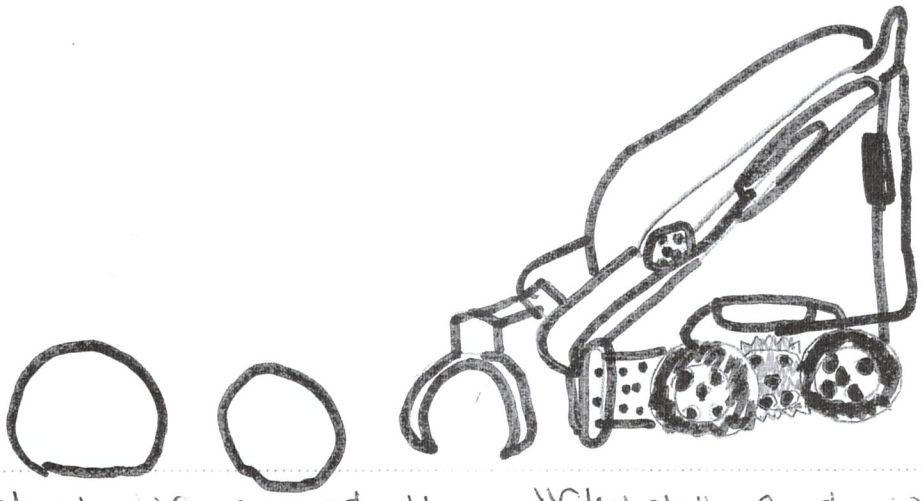
Team Photo

Robot Design

motors; 1 2 controls the wheels

3 lifts the arm

4 opens & closes the claw



Our robot is named the "Clutch" and what it does is, it pick's up the balls with its claw. And its also able to move the balls

1 building base 10/25

Brainstorming

Invite a student to lead the session, and help them stay on task by repeating the title of the session when they stray from the objective. Appoint a student to record all of the information on a whiteboard, large paper on the wall, on the computer or directly into this engineering notebook. Begin with **What** Not **How**. Let students come up with **what** they want to the robot to do, **not how** they plan to do it. The design process will kick in after the strategy has been developed and agreed upon.

We want our robot to be tall enough to score 6 point, be able to clear the Cereals, yet still be small enough to hang from a low bar.

Game Strategy

Our game strategy is to first move the balls into the bottom rack, then clear our side of the cereal. And by then we have enough time to hang our robot.

1

Field Diagram

☐ Think
■ Do
■ Test

Make base & continue to work on top
If its sturdy enough for the top (claw)

mostly today we want to find the right pieces and keep everything together for tommorow

name miley

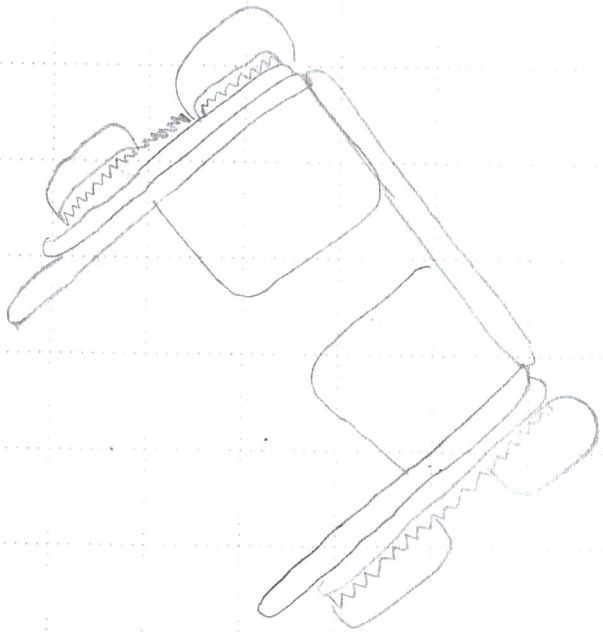
date 10/25/21

VEX IQ

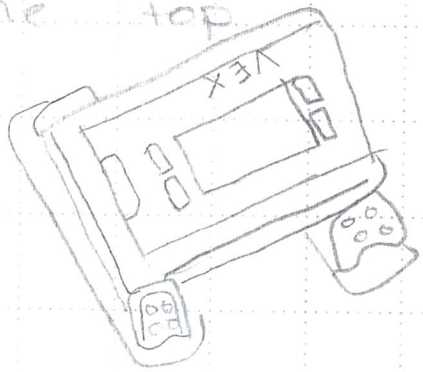
We finished the bottom so now we'll program the brain and motors for the wheels

-symiah

The bottom



the top



I'm going to start helping Cody find the top / Claw parts

-miley

We also used black ink to show our base and blue ink for our brain. And then red ink for our motors

name Miley & symiah

date 10/25

Field Diagram

- ☐ Think Where are the balls at?
- ☐ Do Find top pieces & program
- ☐ Test If the program works

We are still finding parts for the top.

name

date 10/26-27

Me and Cody are still finding parts for our claw / and the other part of the top

-miley

Symiah is starting to program, and find the right parts the [illegible] for the motors [illegible]

Things we need; smaller wheels, a rubber band, the rest of the parts, and taller / smaller [illegible]

Name miley 3 cody, Symiah

Date 10/26-27

Field Diagram

☐ Think If we go the [illegible] parts
☐ Do See if [illegible] to the [illegible] Blocks
☐ Test If our parts [illegible] [illegible]

To do list

- Change wires
- Test the length change
- See if our parts are correct
- See if program works.

name

date

This week was mostly to find the right wires, or even just the right piece for our claw so hopefully we'll find the correct parts. -miley

Field Diagram

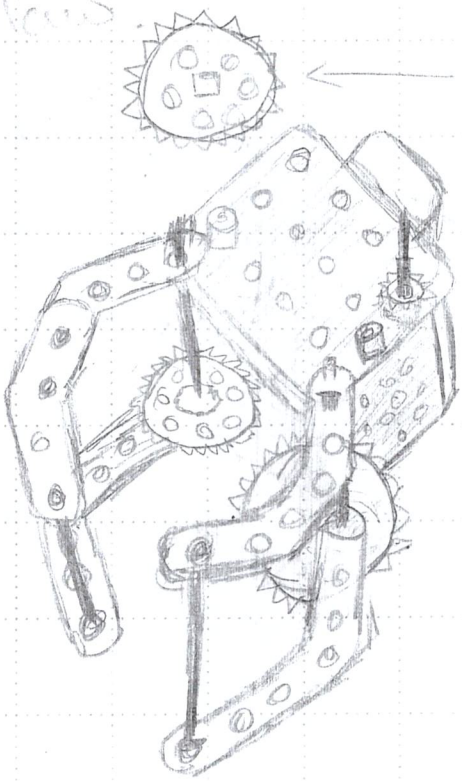
☐ Think How many bars do we need?
☐ Do Get our [illegible]
☐ Test

Bars [illegible] Red [illegible]

name

date

Today is our first day back since October 28th, and we still need to find some parts to we're almost done with our claw.



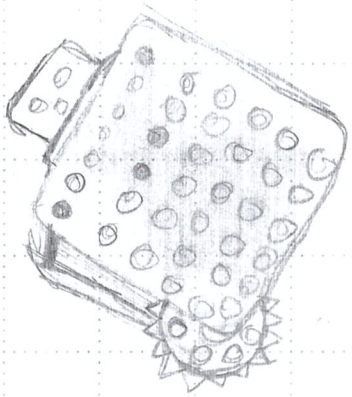
← started to find the pieces that we needed for the claw.

The claw part

Name

Date

We've now have found the correct parts so now we just have to see if they'll work correctly.



We like the parts we have and it works with our program. So mostly we our done. And now we'll just start drawing & making the play tray.

Name

Date 11/4

Umm we kinda dont like the height of our robot, and the way our [illegible] So we are going to make a few adjustments.

We cant really change our program right now cause we are moving rooms, so this week we hope to start changing the program. But we also arent at school for thanksgiving next week. So thats also a problem we are having.

Name

Date 11-15-19

We finally are off of break and done moving and setting everything up. So we are now just going to start re-programing before our Christmas break.

Our Diagram isn't really working so we were to try and do [illegible] balance the diagram [illegible]

name

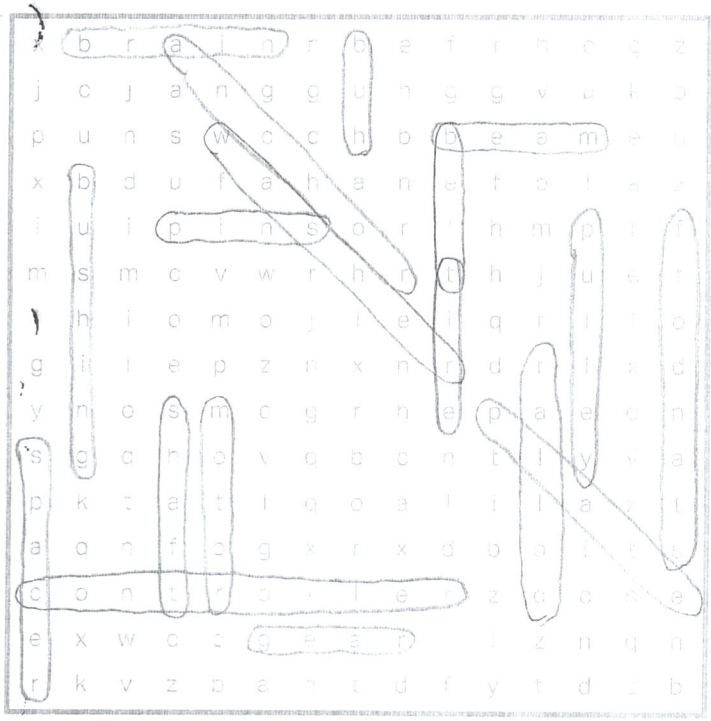
date 12-6

Field Diagram

☐ Think

☐ Do

☐ Test



VEX IQ Hardware

Find and circle these words. They run up, down across, and diagonally.

~~beam~~	~~pins~~	~~collar~~
~~bushing~~	~~spacer~~	~~bolt~~
~~motor~~	~~controller~~	~~hub~~
~~plate~~	~~standoff~~	~~shaft~~
~~washer~~	~~pulley~~	~~gear~~
~~brain~~	~~anchor~~	~~tire~~

name

date

Program isn't really working. So we plan to try and find out why it isn't working.

name

date 12/7

Nothing is really working in our lab we are currently in so we are going to ask if we can move into the upstairs lab next week.

name

date 12/8