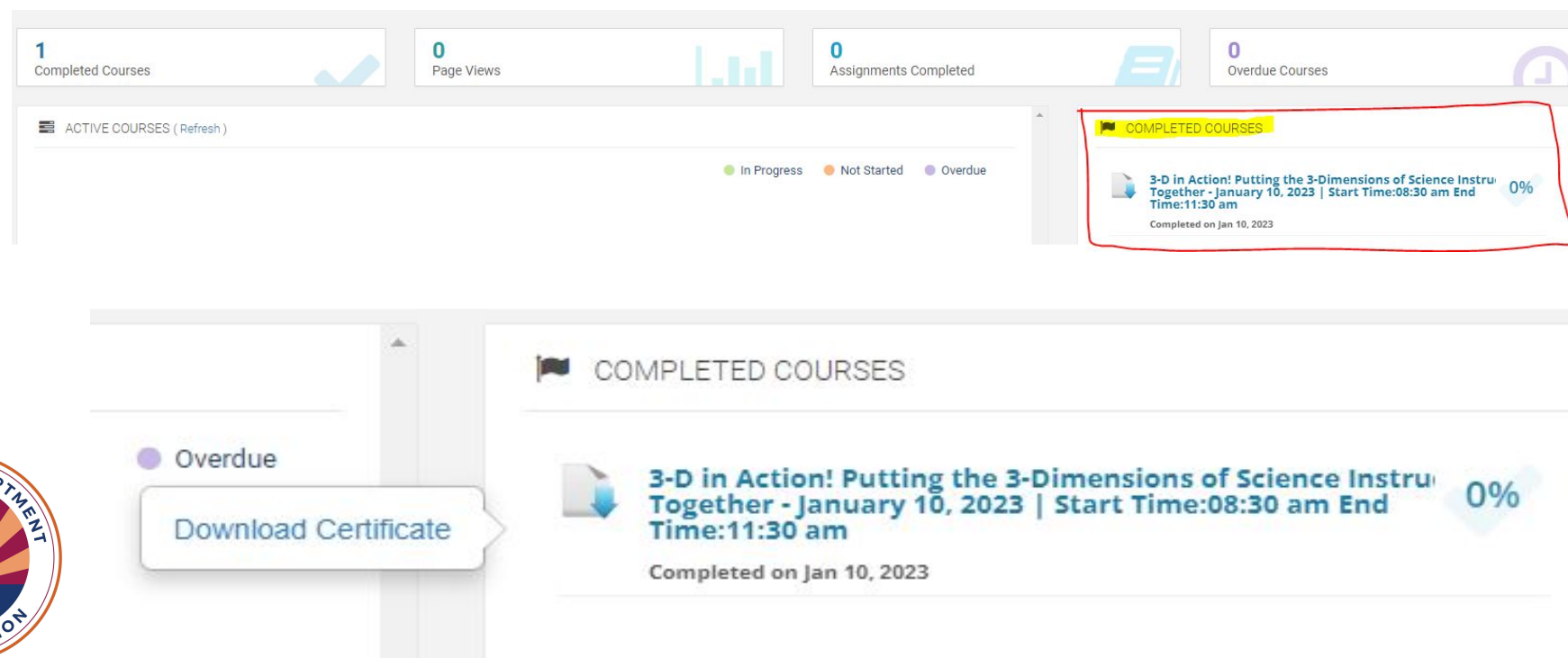


WELCOME!

Please review this information while we wait for all to join!

Attendance, Resources & PD Clock Hours

- You must stay on the whole time- .5 hours- to receive credit
- Please follow the directions below to obtain your PD certificate
 - In the new [ADE Professional Learning and Development \(APLD\) system](#) when you login to your ADEConnect account you will see a list of active courses and completed courses, as demonstrated in this screenshot:



Click on the completed course for which you want to obtain your certificate. When you click on the course link, a small pop-up will appear that says “Download Certificate.” Click that link and it will download your certificate as a PDF, see screenshot to the left.



Celebrate Computer Science Education Week with ADE!

December 7, 2023



What is Computer Science Education Week?

CSEd week is an annual call to action to inspire K-12 students to learn computer science, advocate for equity and celebrate the contributions of students, teachers, and partners to the field.

#CSEverywhere @azedschools





Welcome!



SARAH SLEASMAN
K-12 ACADEMIC STANDARDS
DIRECTOR OF SCIENCE & STEM



ALECIA HENDERSON
K-12 ACADEMIC STANDARDS
COMPUTER SCIENCE & EDTECH
SPECIALIST



CHRISTEL BRUNO
K-12 ACADEMIC STANDARDS
STEM SPECIALIST



Introducing today's special guest:



Tara Menghini
Educational Technology Teacher, K-6
Knox Gifted Academy



TARA MENGHINI

K-6 Technology Teacher



Knox Gifted Academy

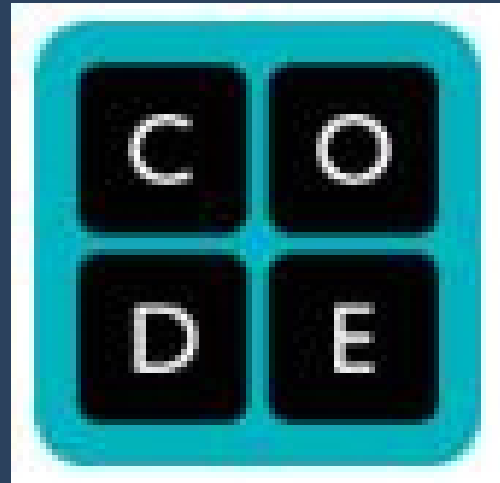
Chandler Unified School District



menghini.tara@cusd80.com



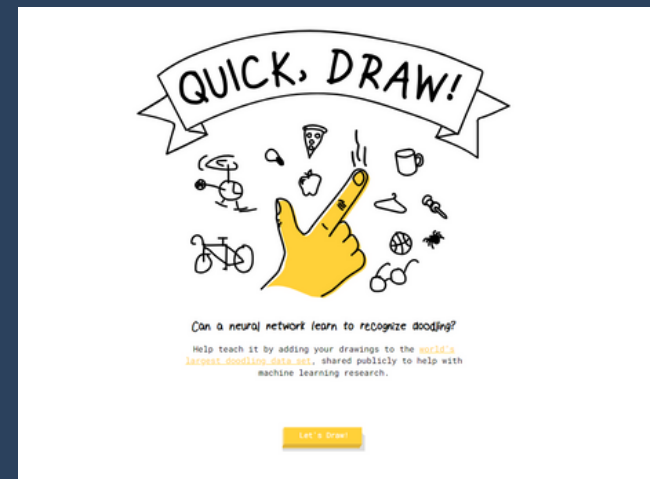
RESOURCES:



CODE.ORG
K-6



KODABLE
K-3



MACHINE LEARNING

SPHERO BOLT
K-6



ROBOTICS AND CIRCUITRY



SWIFT PLAYGROUNDS
2-6



TYNKER
1-6



GAMIFIED CODING





MEOWBITS/
MAKECODE ARCADE
3-6

ONLINE/APP CODING

DESIGN THINKING


Empathize
Understanding people


Define
Figuring out the problem


Test
Refining the product


Ideate
Generating your ideas


Prototype
Creation and experimentation

Credit: MAQE

-Emerging AI

-Twice Exceptional Learners

-COLLABORATION

TECHNOLOGY:

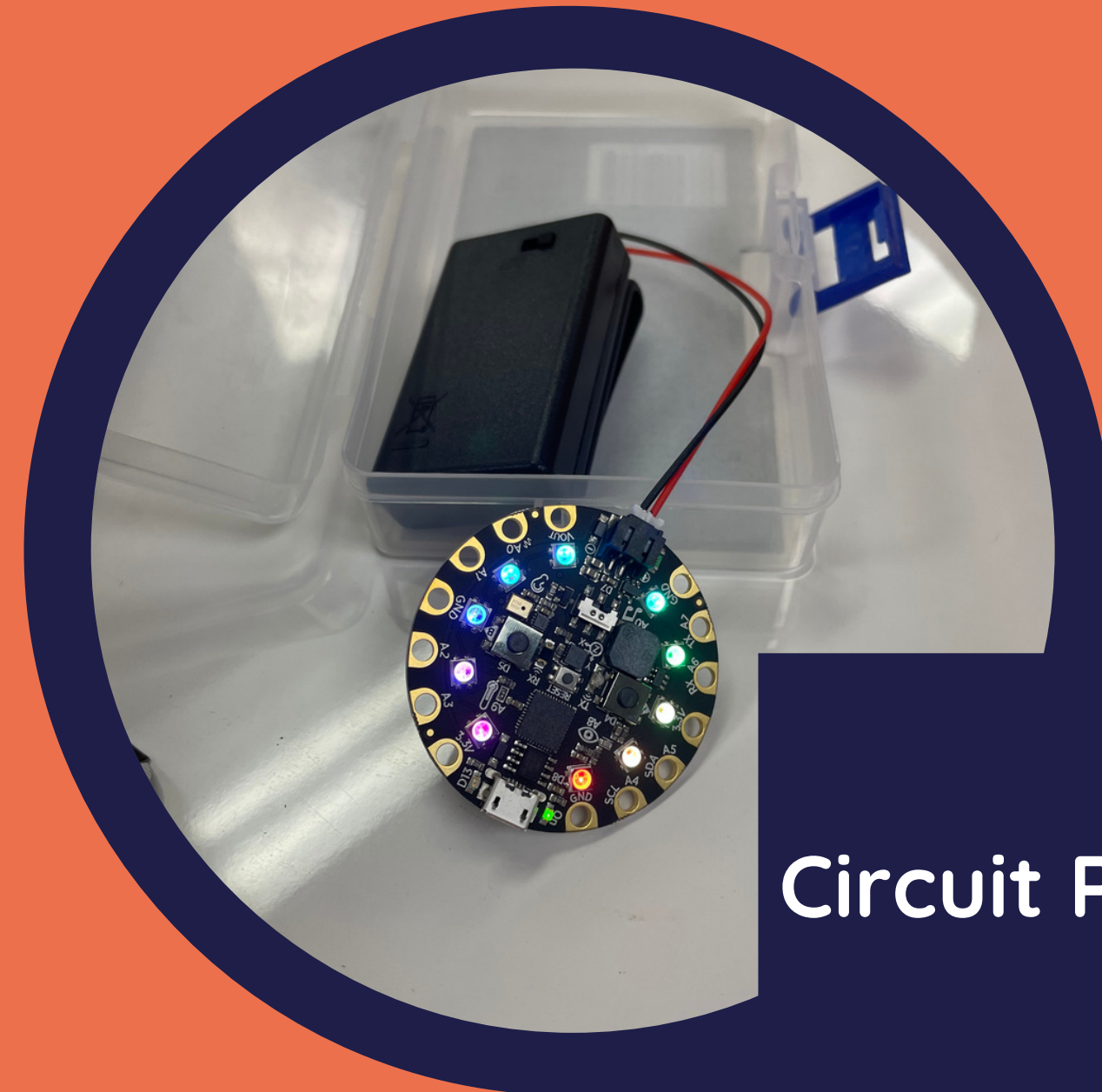
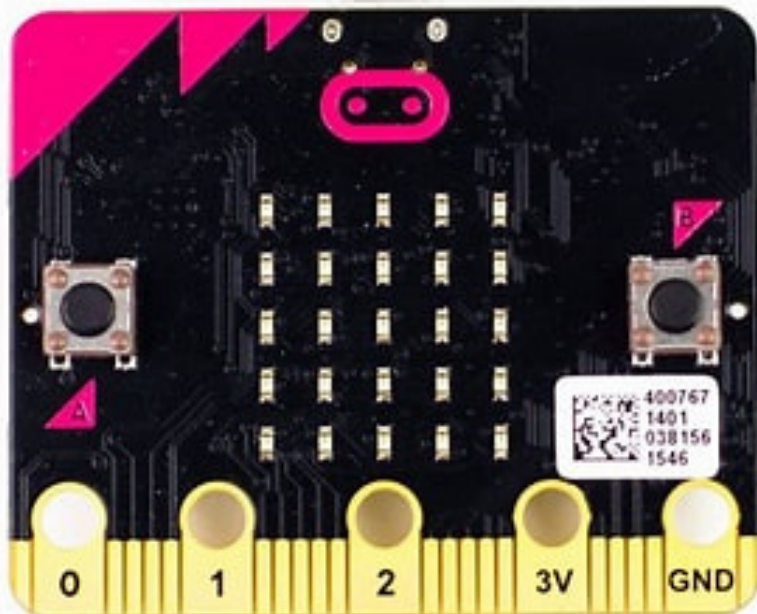
Physical Computing and circuits

Little Bit
Kits



Misc. motors,
wires, and
LOTS of
batteries!

Micro:Bits



Circuit Playgrounds

ELEMENTS OF THE BUILD

Cardboard



Flip the switch



Push in cardboard



Cut straight lines



Cut complex curves

Cutting Tools

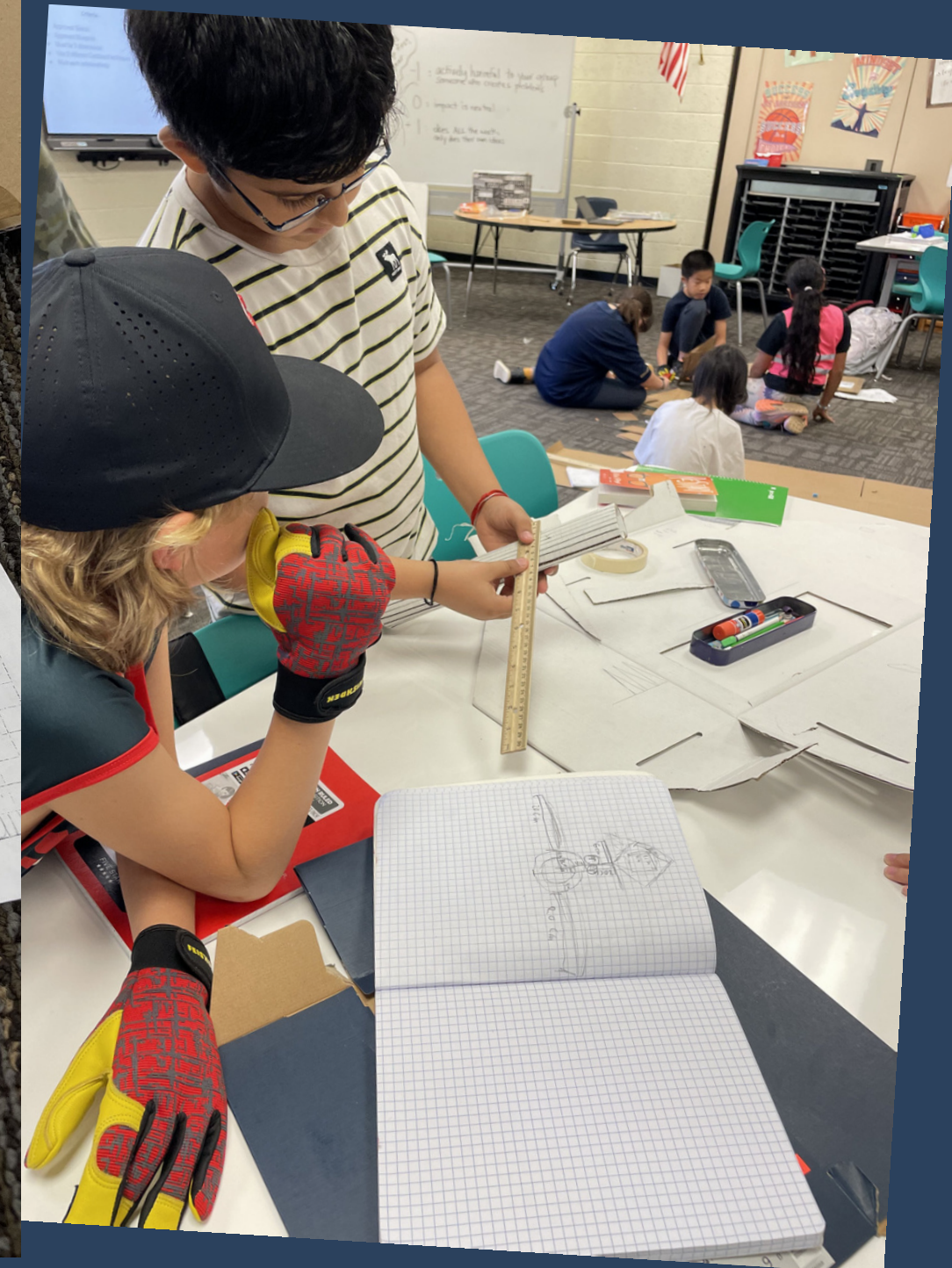
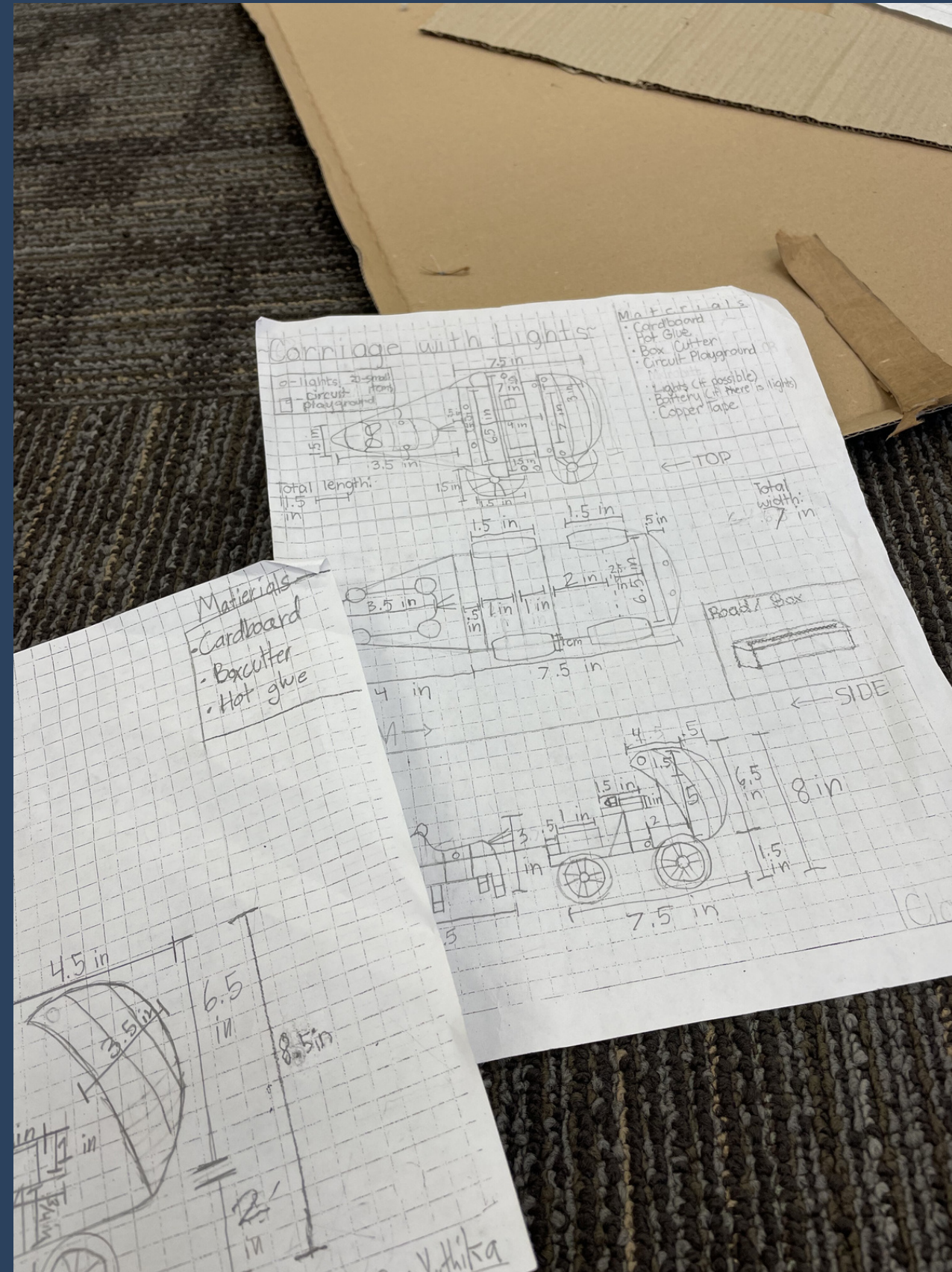
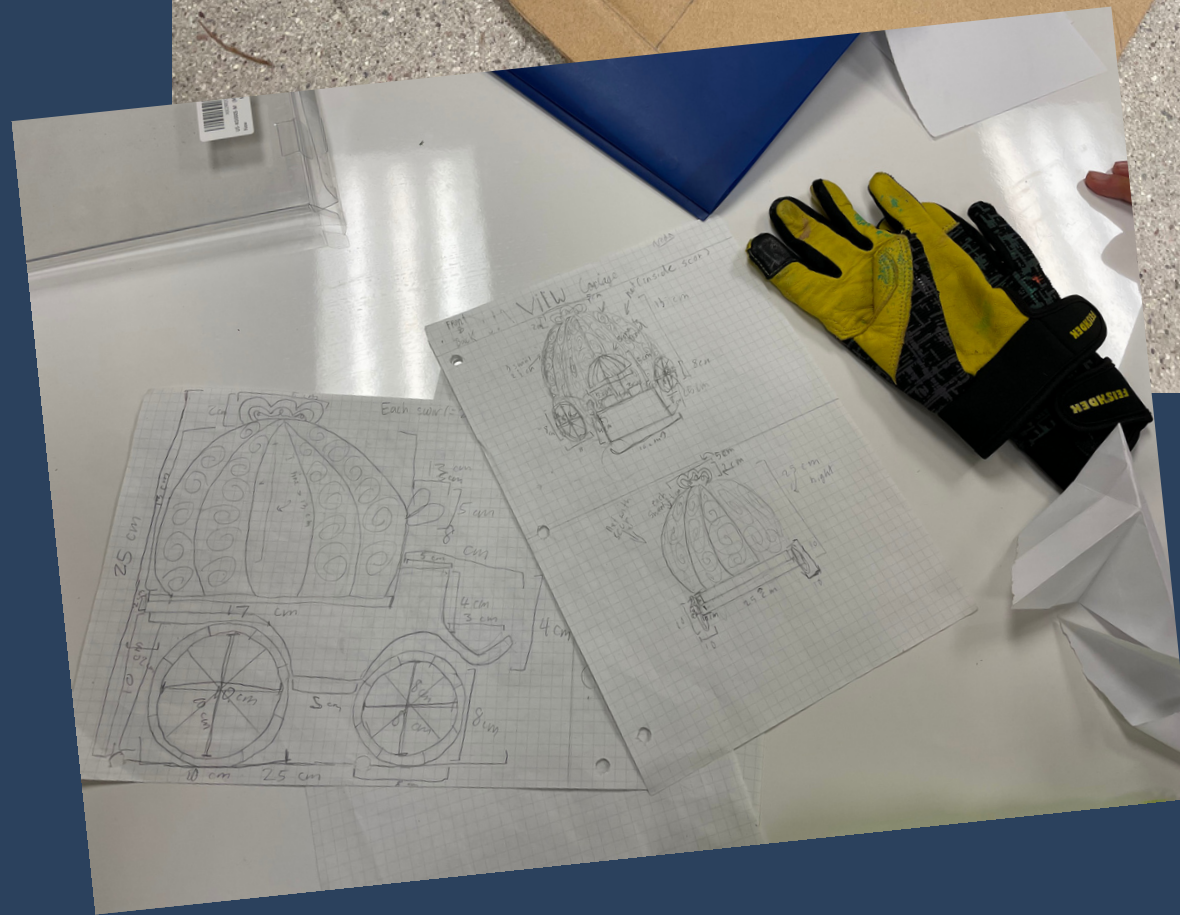
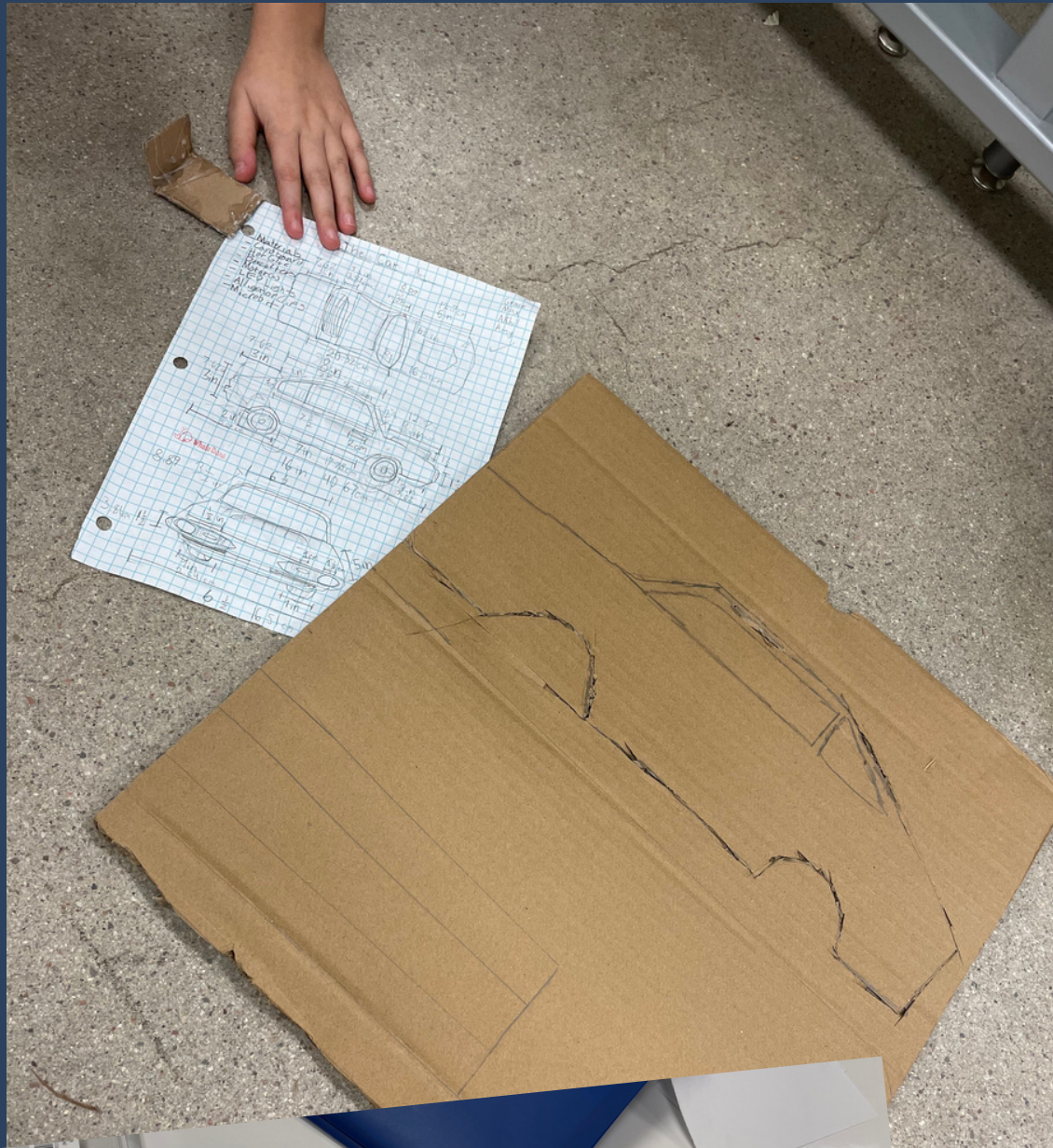
“InvenTable”

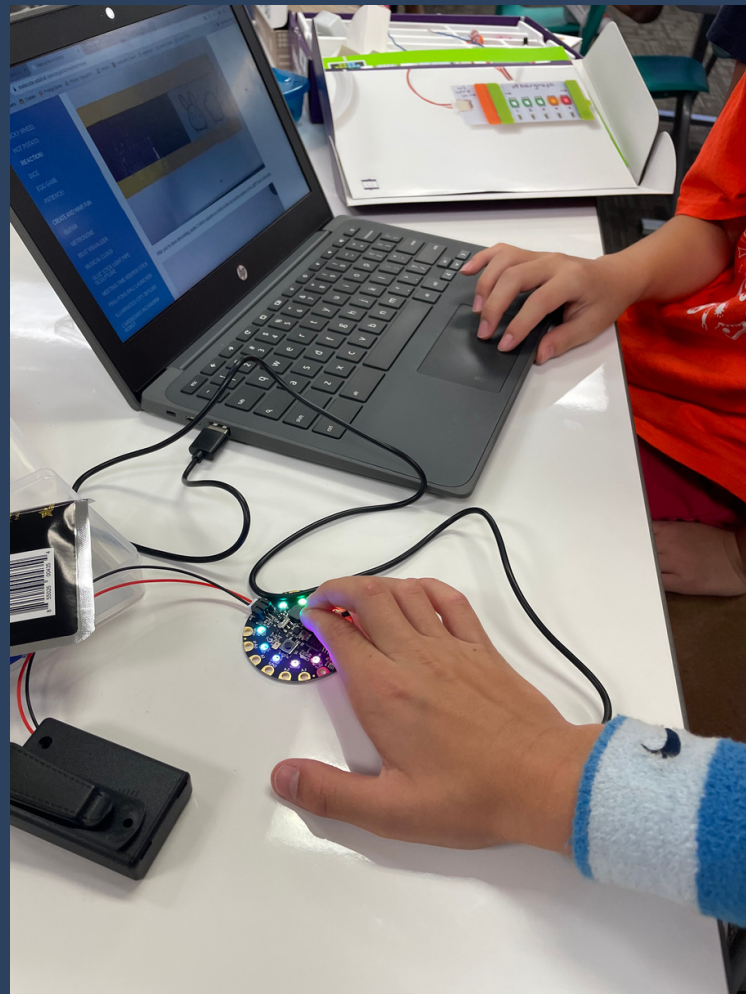


Glue Gun training



EMPATHIZE & DEFINE

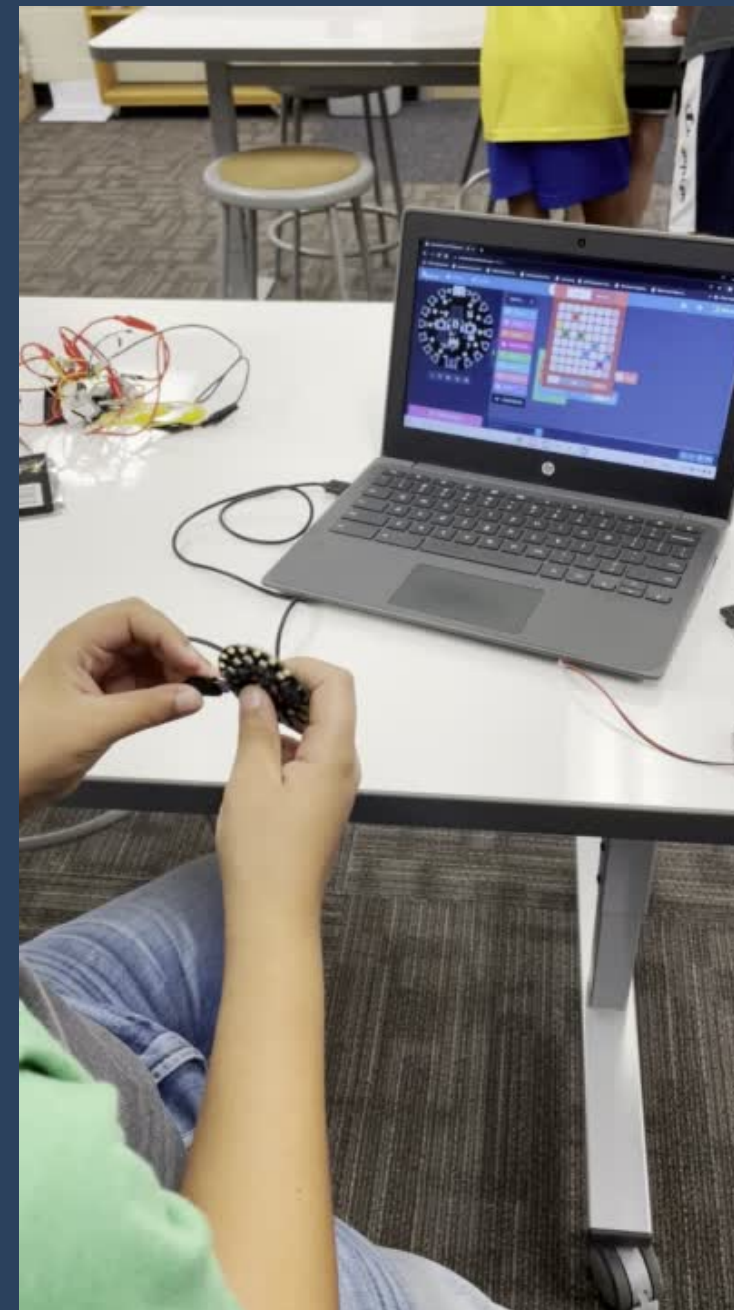


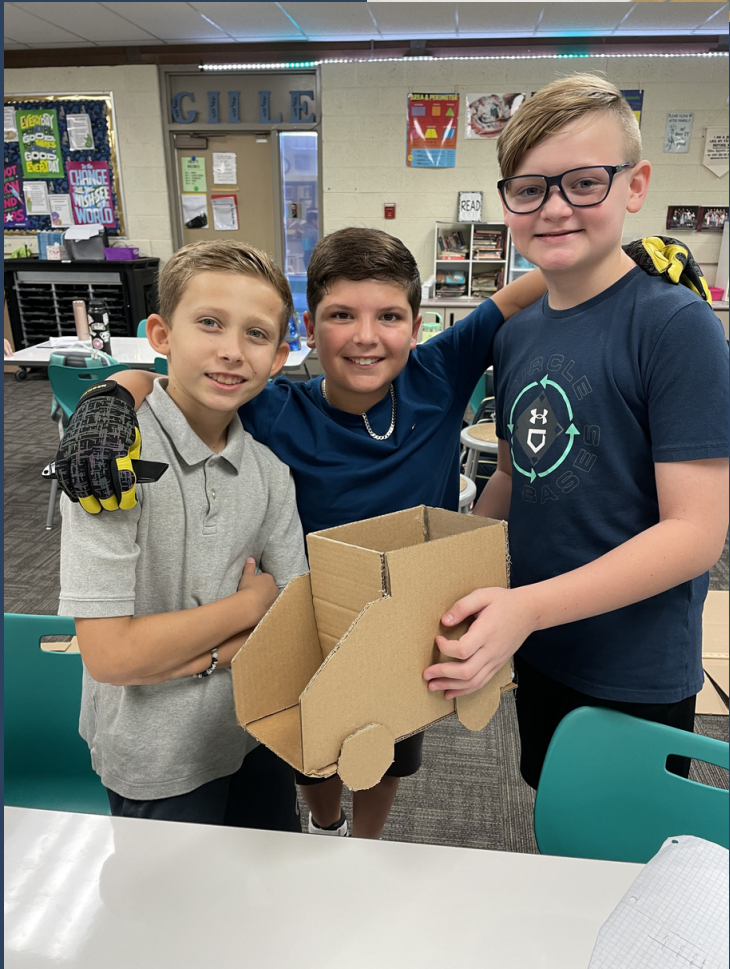


makecode.adafruit.com

makecode.microbit.org

[https://sphero.com/pages
/littlebits](https://sphero.com/pages/littlebits)

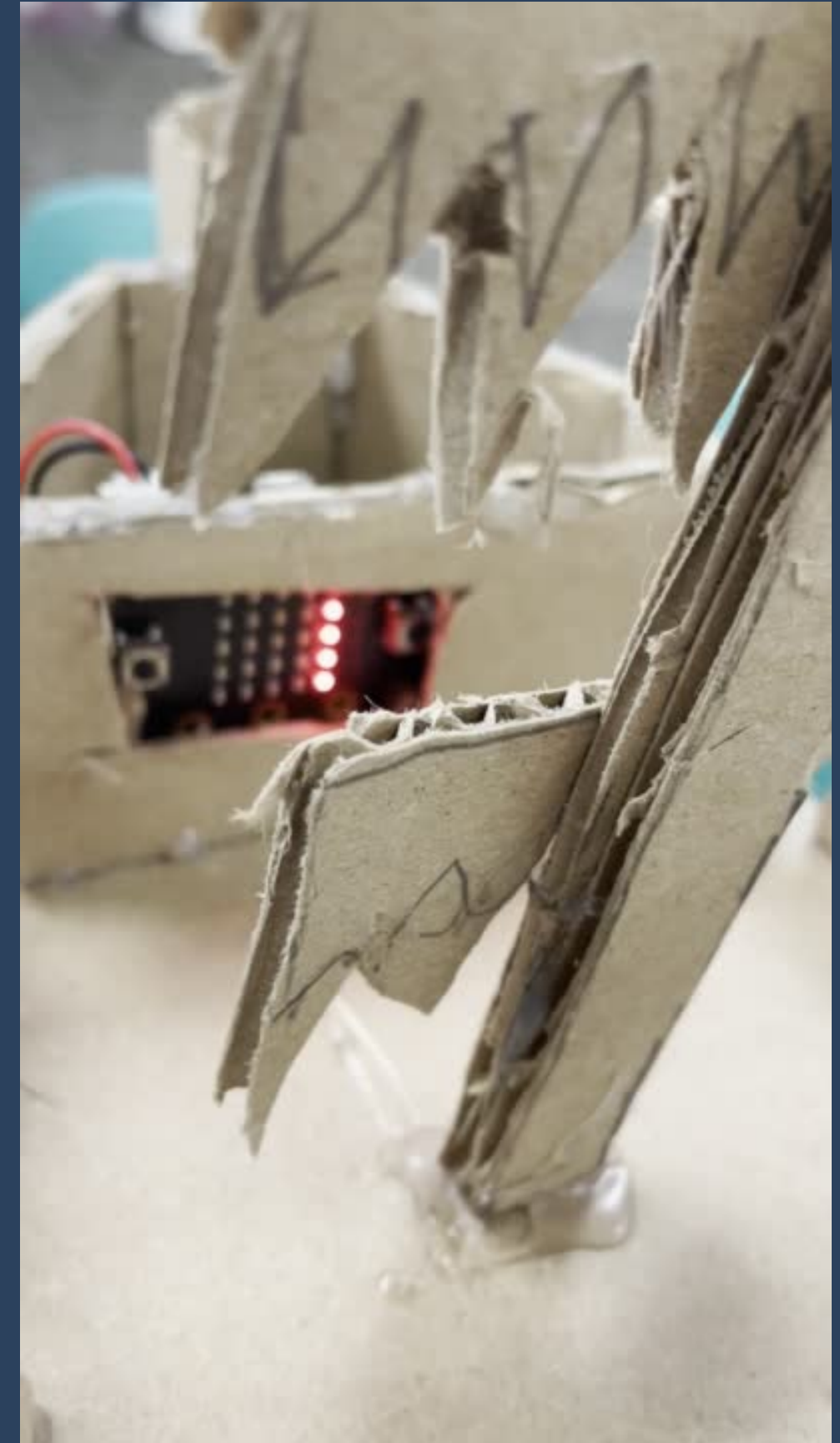
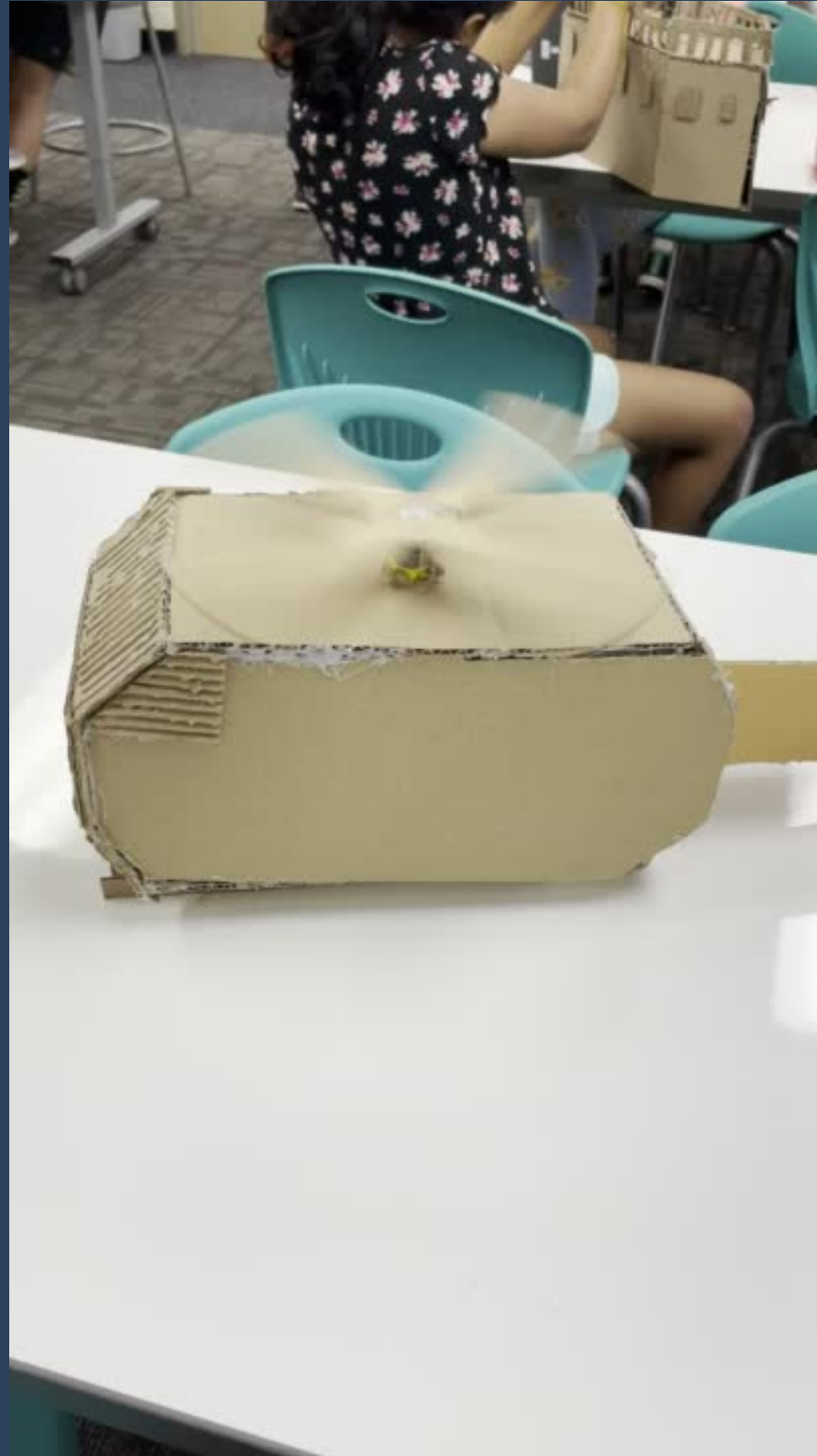




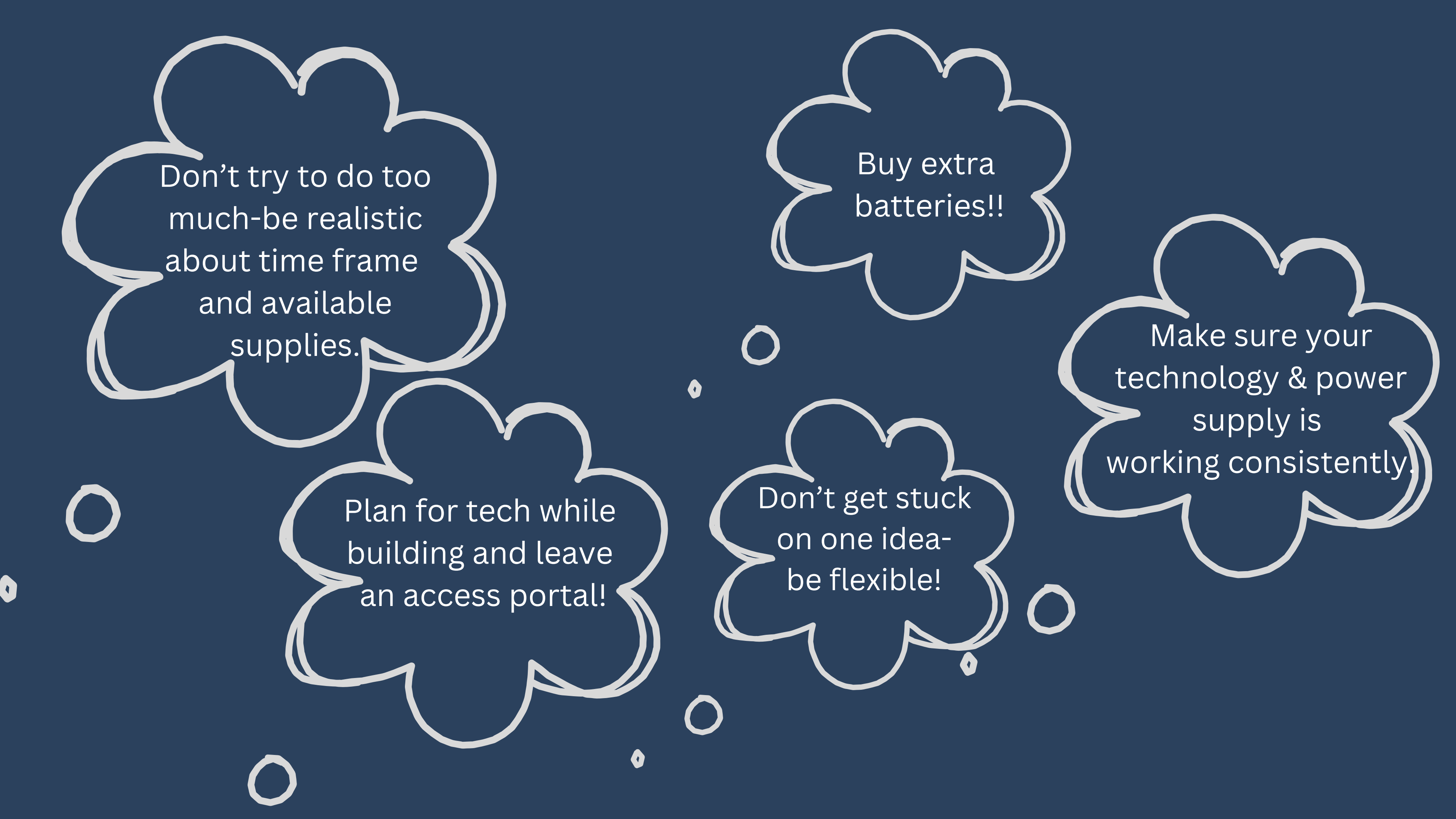
PROTOTYPE



Tools VS Mindset & Outcome



✓ Empowered Learner ✓ Innovative Designer ✓ Creative Thinker



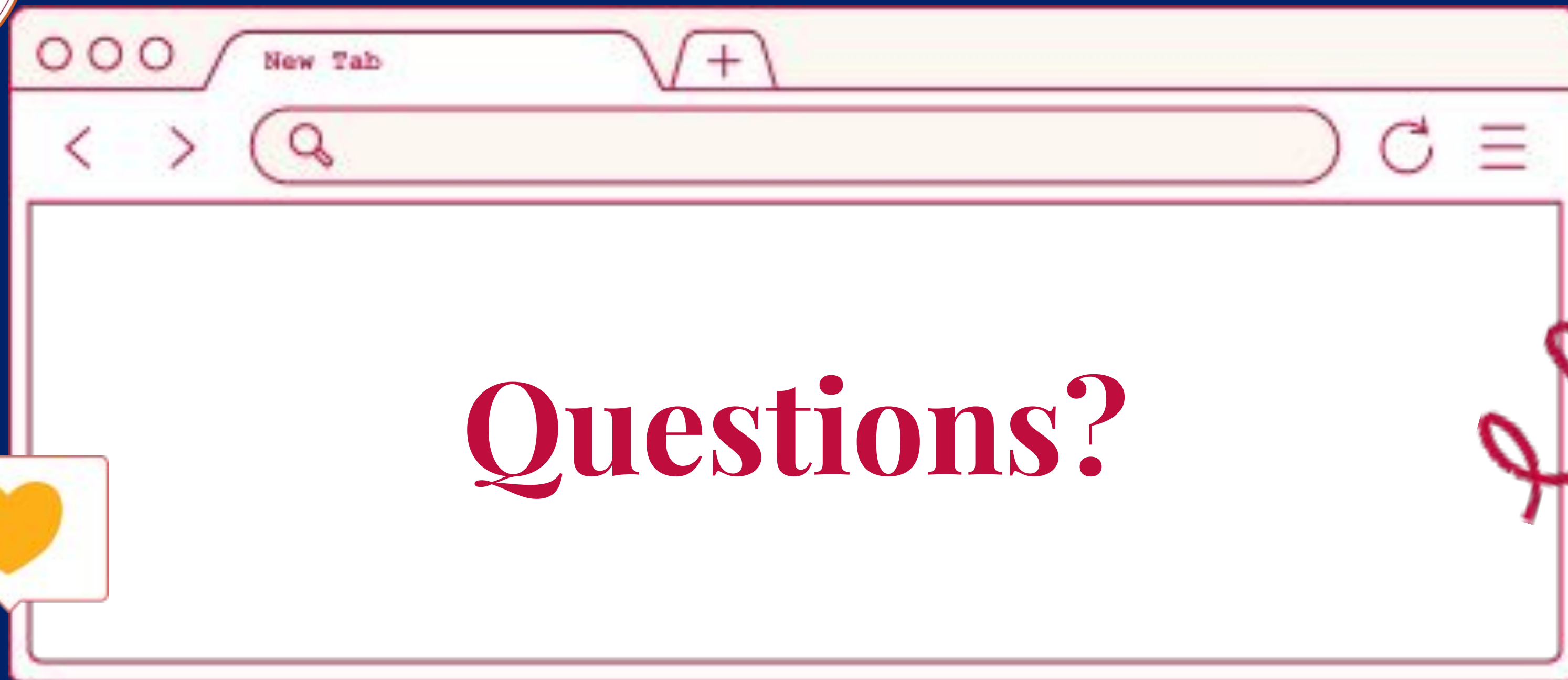
Don't try to do too much-be realistic about time frame and available supplies.

Buy extra batteries!!

Make sure your technology & power supply is working consistently.

Plan for tech while building and leave an access portal!

Don't get stuck on one idea-be flexible!

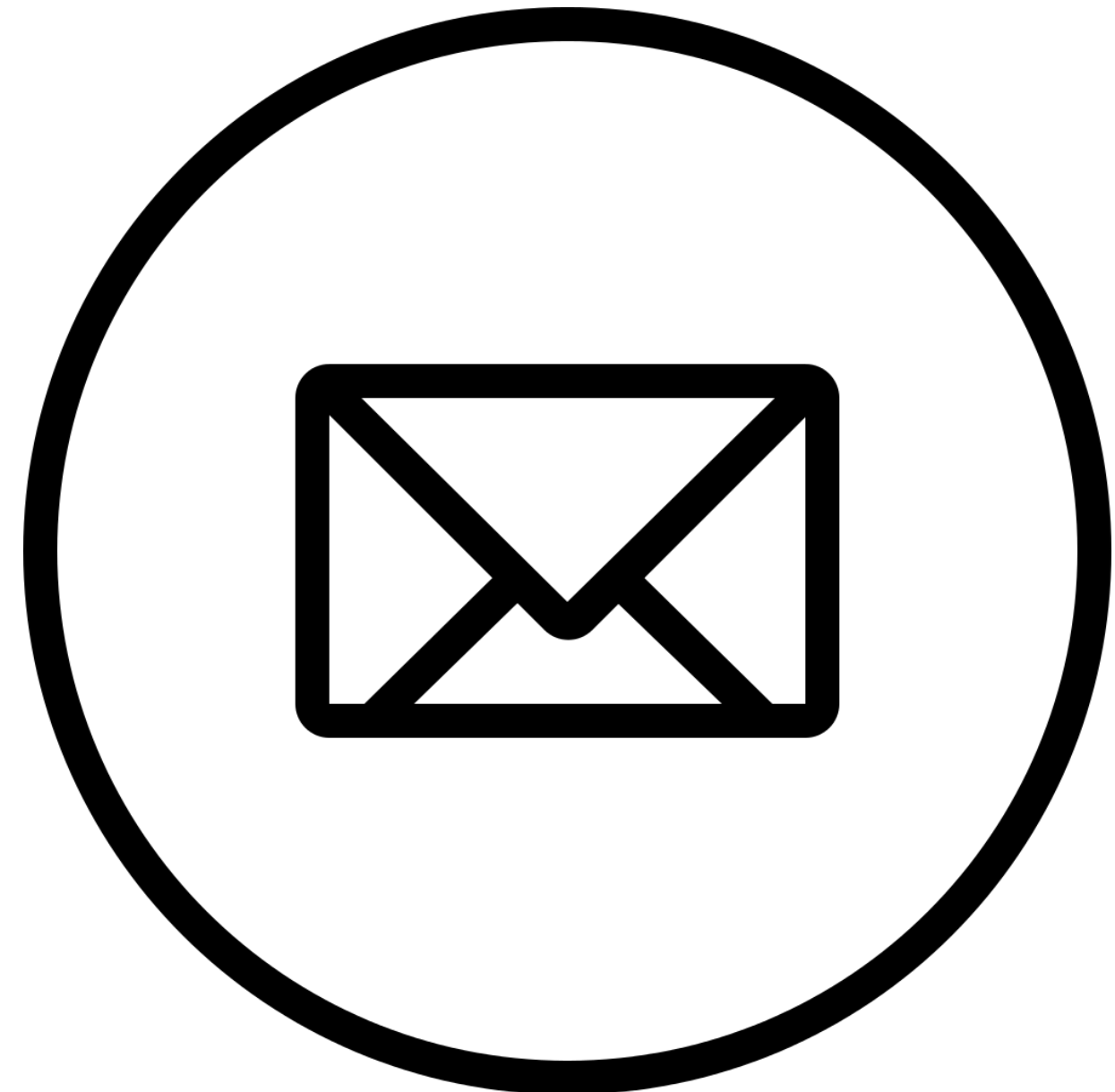
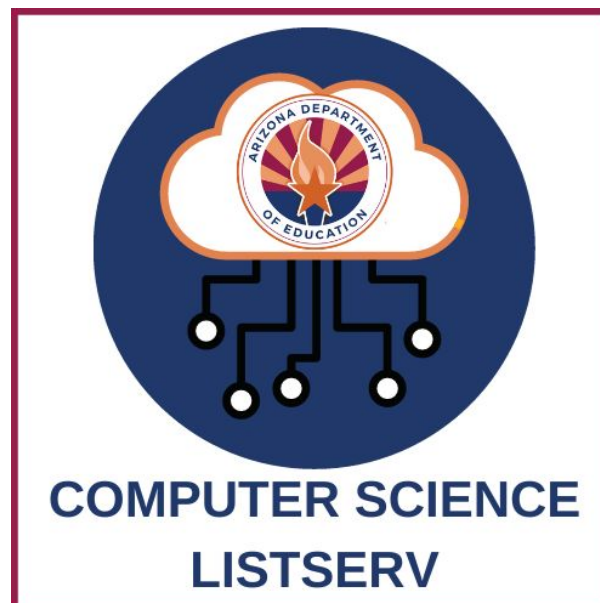


Sign up for ADE Listserv!

Educational Technology



Computer Science





Many Thanks!

Please reach out! We are here to help!



THANKS



Alecia Henderson
Computer Science and Educational
Technology Specialist
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Sarah Sleasman
Director of Science and STEM
Sarah.Sleasman@azed.gov

[Computer Science Standards Webpage](#)