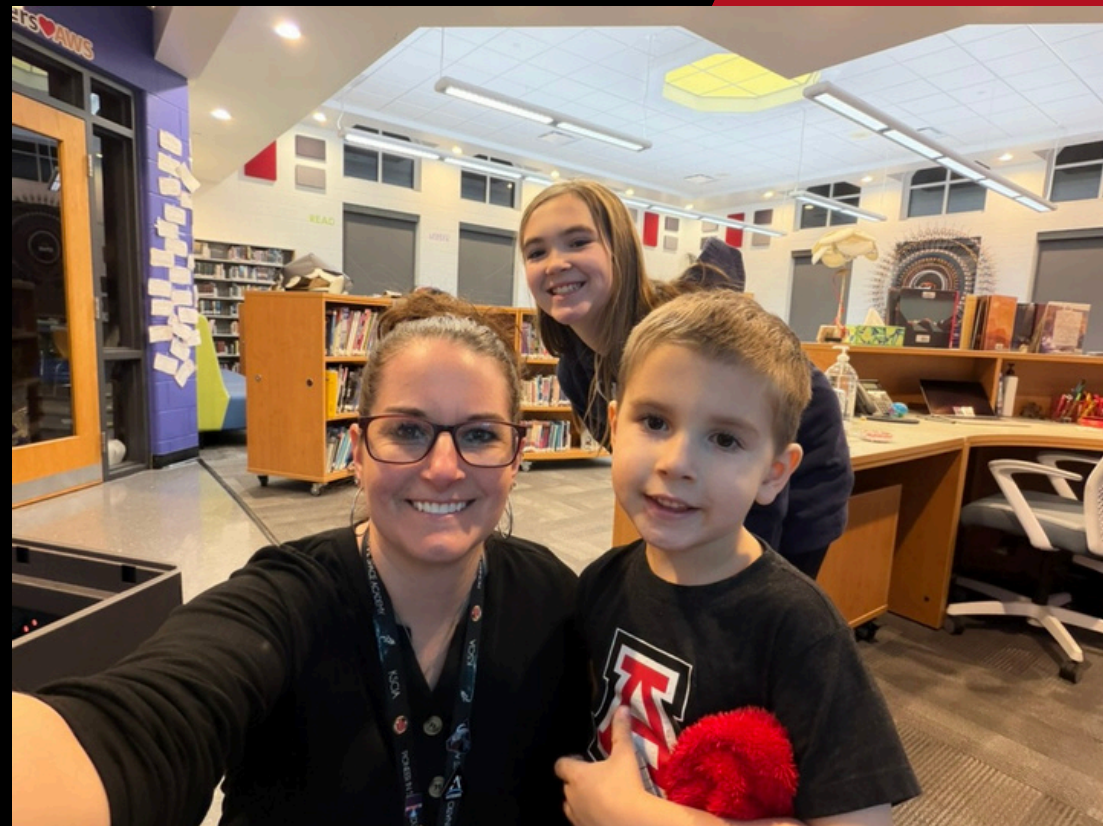
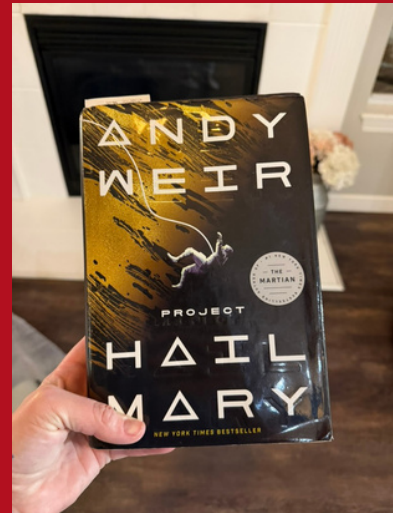


Cardboard and Curriculum



About Me:





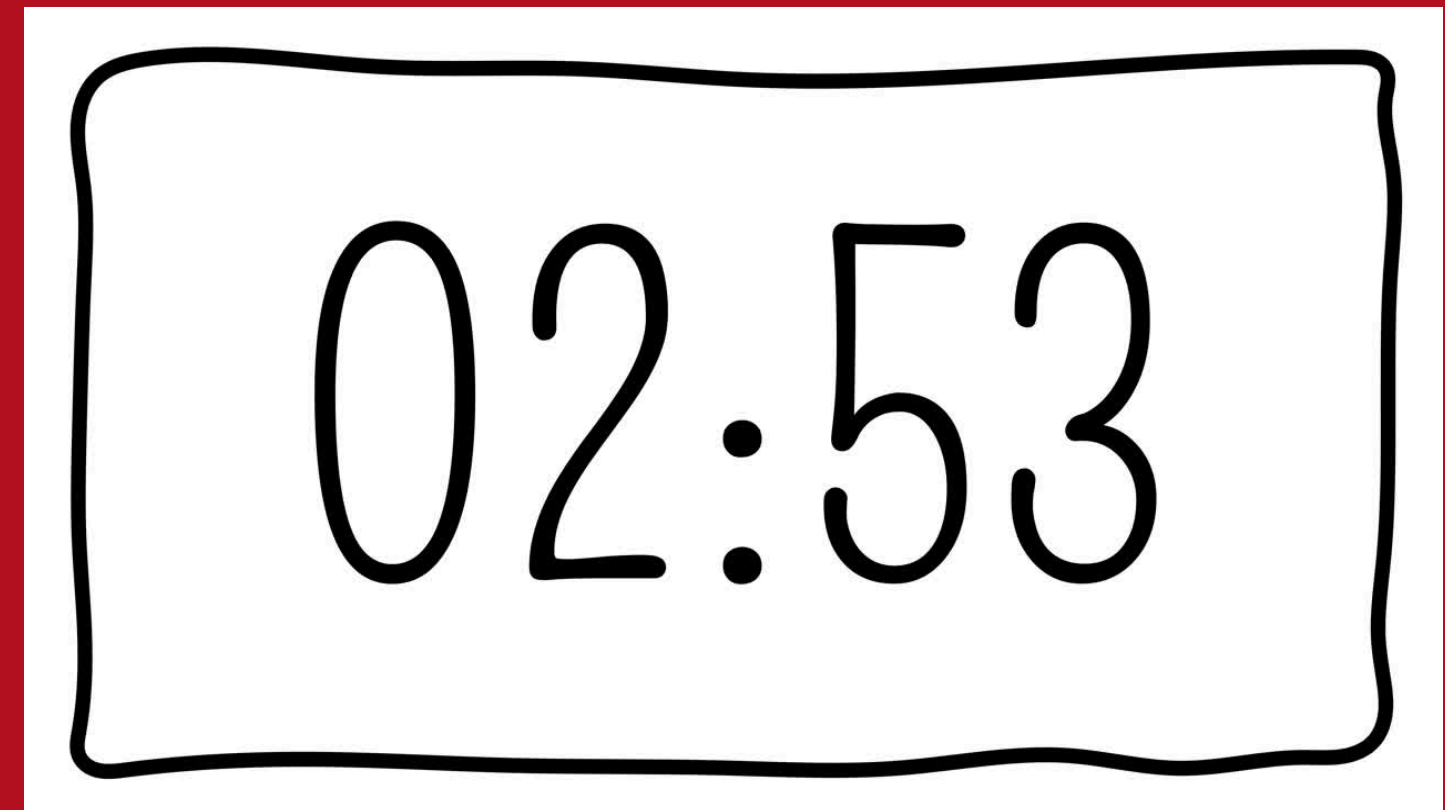
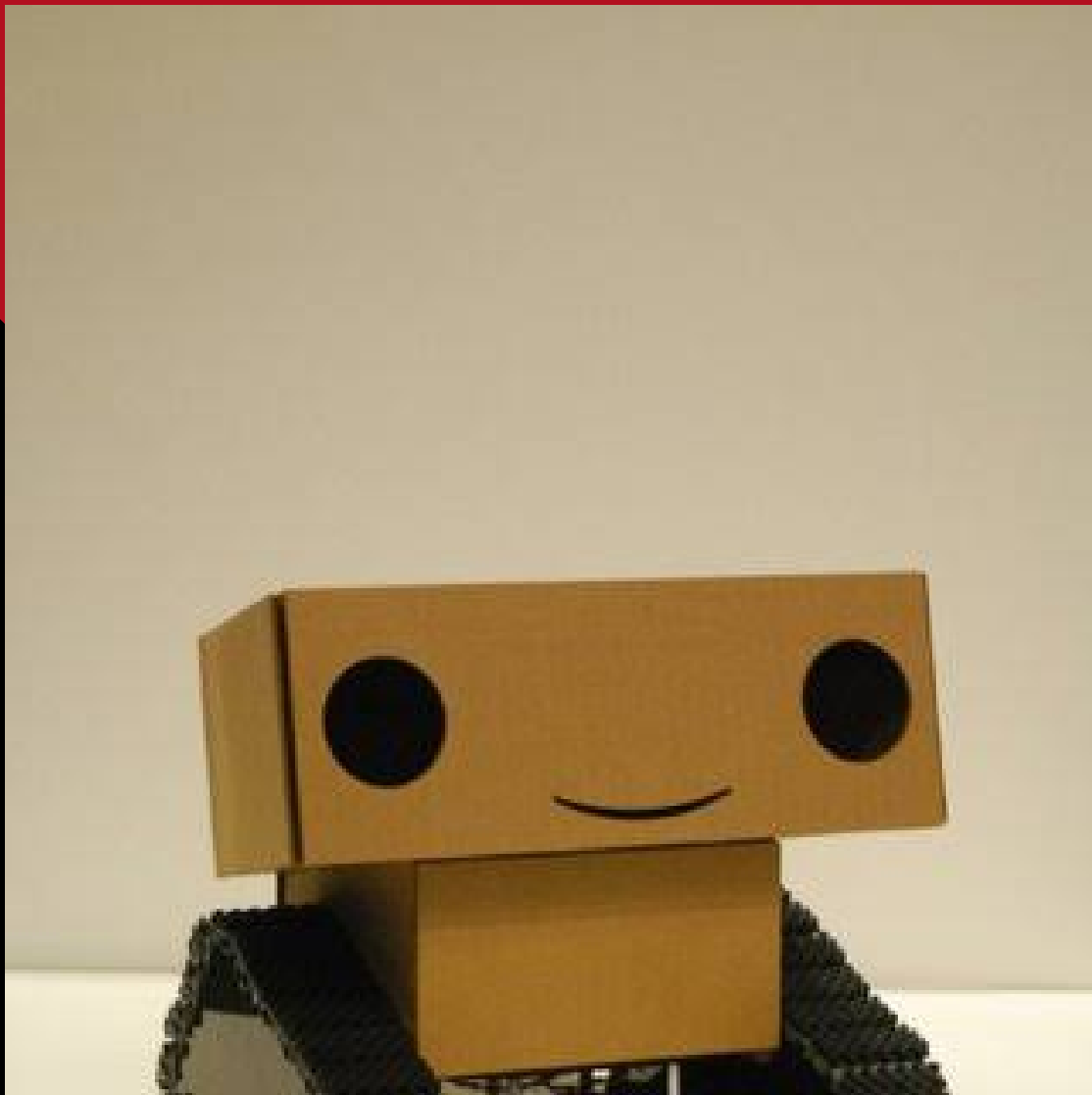
Think Big



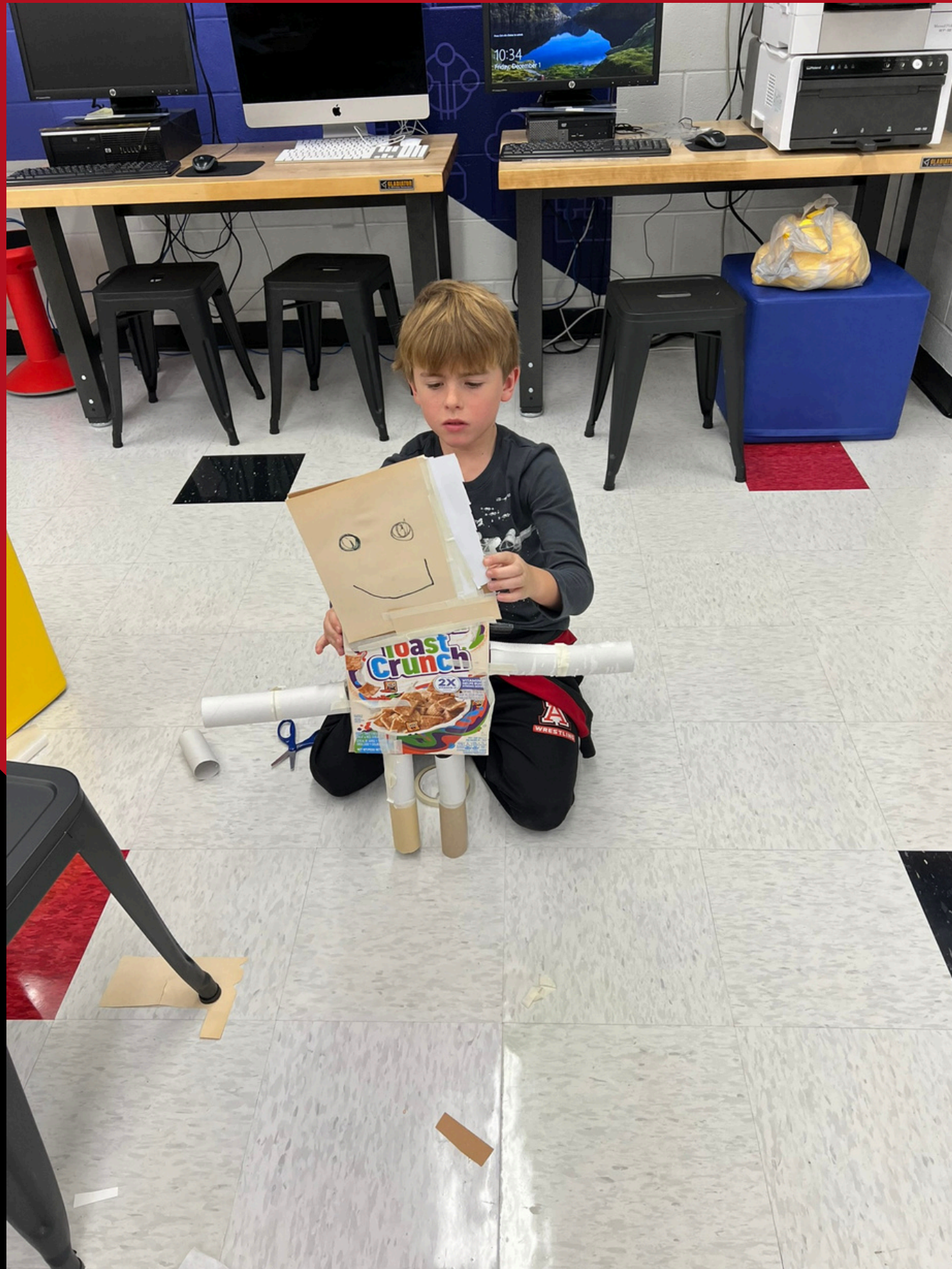
Rip and Represent

Take one small scrap of cardboard.

When the timer starts: tear, rip, fold, or bend your cardboard in a way that represents one thing about yourself.



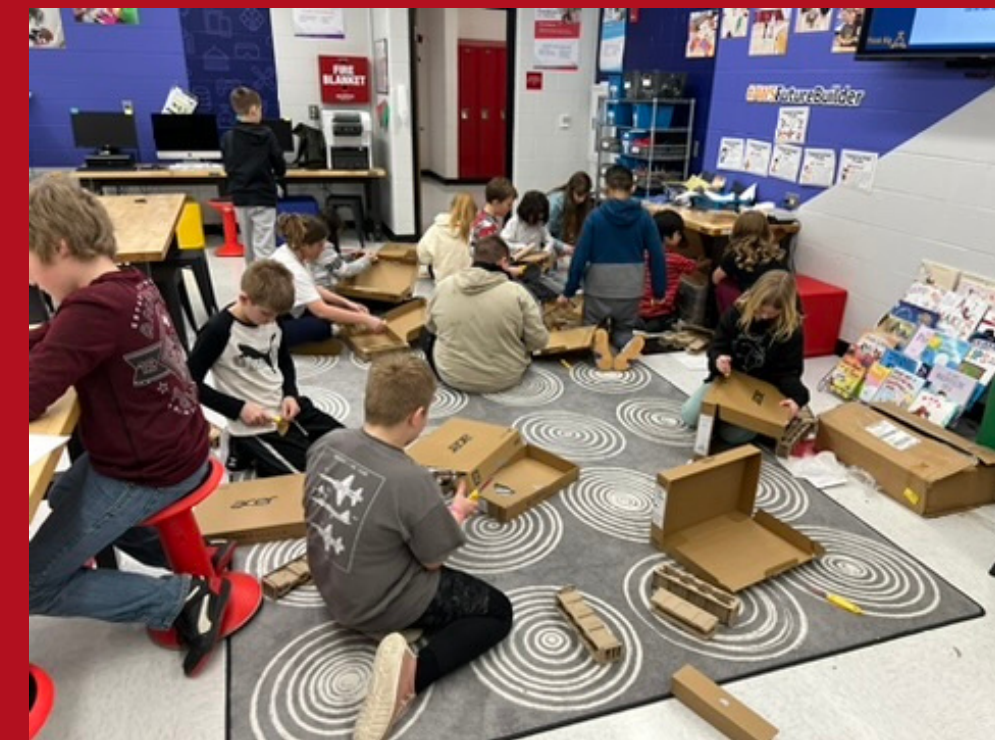
Rip and Represent



- Find a partner.
- Guess your partners shape.
- Once you have taken a guess, your partner can explain their work.

Reflect

- What was harder: Trying to tear the cardboard or trying to guess your partners shape?
- How did it feel to build something without scissors or tape?
- If I had given you a pencil and paper instead of cardboard, would your design have been different? How does the material change how we think?
- We started this activity with zero budget and no instructions on 'how' to rip the cardboard. How did it feel to have that total freedom?
- How can we use this same 'low-stakes, no-wrong-answers' approach when introducing a difficult academic topic to our students?

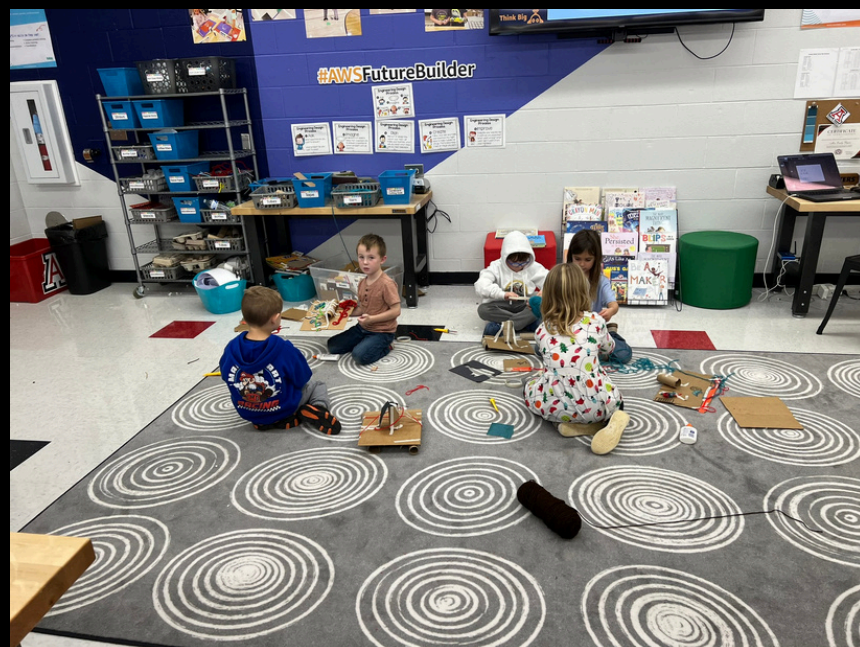


Using Cardboard with Curriculum

"Reading about a concept in a textbook or even seeing a demonstration in class is not the same as physically experiencing what you are learning about. Our actions matter for how and what we learn."

-Dr. Sian Beilock

What are the biggest barriers when integrating hands-on, service learning, project based learning in our classrooms?



Now What...

How can we mesh traditional learning with hands-on experiences?

Start small



Examples

Kindergarten- Math Patterns

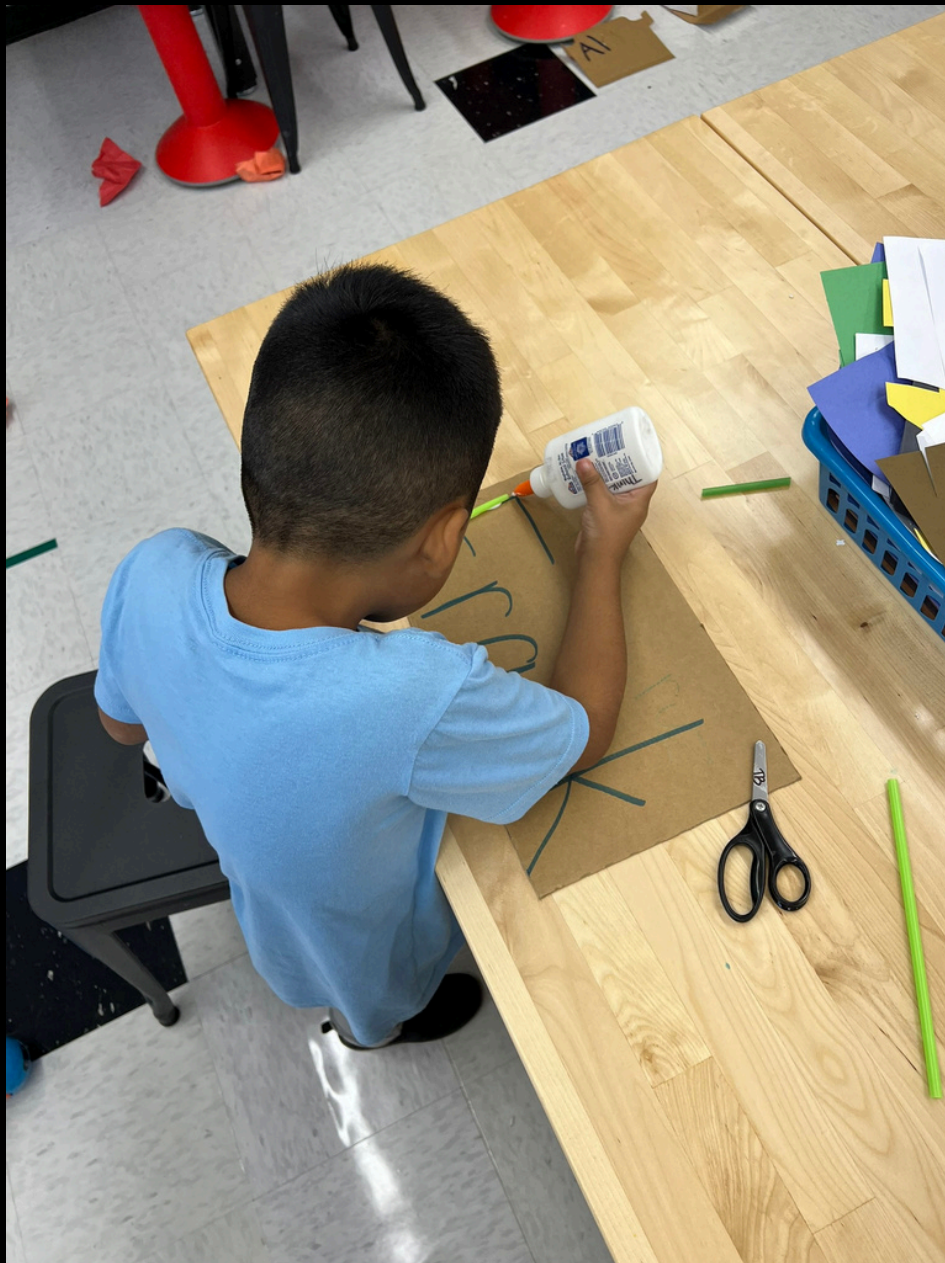
Create something fall-themed WITH a pattern



Examples

Kindergarten- Writing Name Writing

Use the materials to create your name!



Examples

1st grade- Social Studies Maps

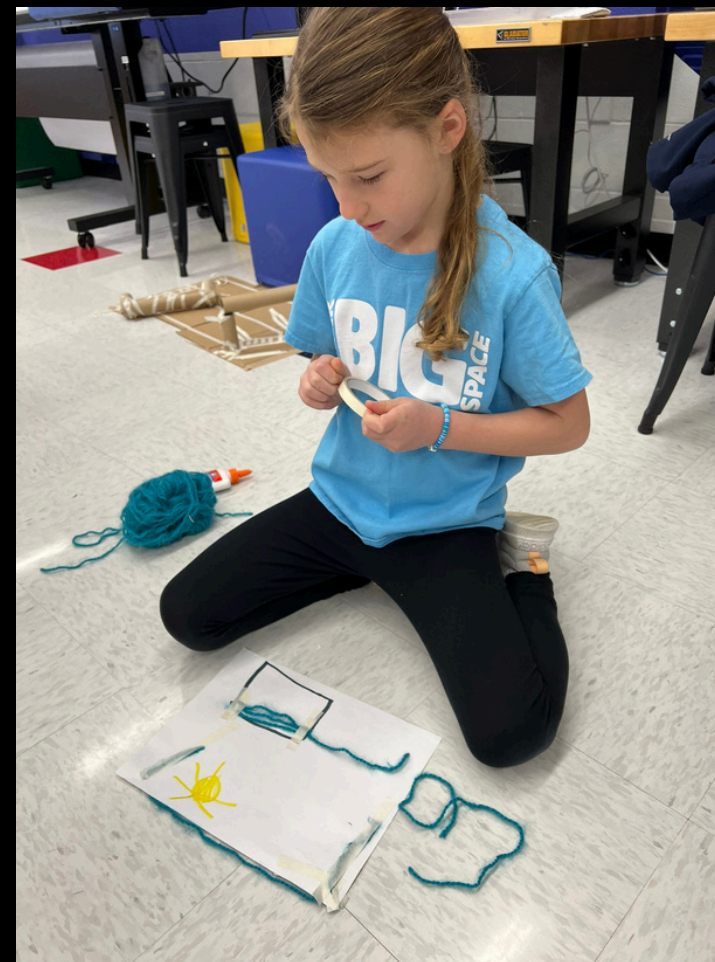
Become a cartographer and build a class map



Examples

1st grade- Writing Opinion Writing

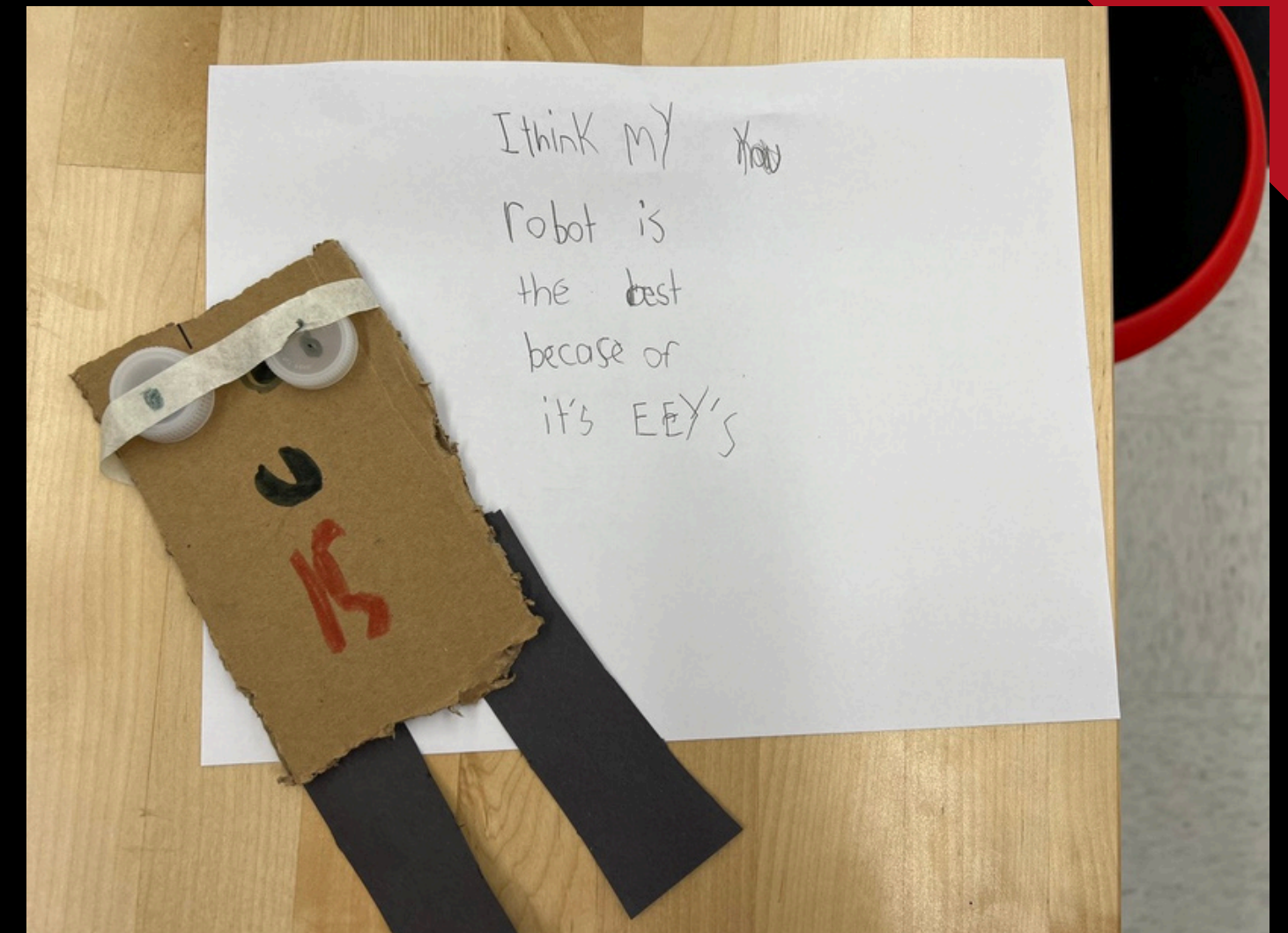
Create the most magnificent thing- why do you think it's the most magnificent thing?



Examples

2nd grade- Writing Opinion Writing

Design and engineer the best robot. Be able to explain with at least 3 reasons **why** your robot is the best



Examples

2nd grade- Biographies Inventors/Inventions

Listen to: Margaret Knight and the Paper Bag. Take one paper bag and create something with it, or turn it into something new!



Examples

2nd grade- Math Measurement and Patterns

Create the perfect playground.

Your perfect playground has to have at least 2 sides that are 6 inches long and 2 sides that 10 inches long. It also must have a sequence or a pattern- you choose what that looks like and where the pattern will go!



Examples

3rd grade- Reading Fairy Tales

Design and engineer the character Alice who can shrink smaller or grow bigger as needed



Examples

3rd grade- Science Penguin Unit

Use the provided materials to create a penguin habitat



Examples

3rd grade- Math Perimeter

Build your perfect playground- The perimeter of the playground has to be 62



Examples

4th grade- Science Convection

Design and engineer something that will transfer heat



Examples

4th grade- ELA Similies and Metaphors

Use the materials and create you! Then write a sentence like the story- I am as
----- a ----- and as ----- as a -----.



Examples

5th grade- Science Space

Design and build a rocket

-Use materials to bring your rocket design to life. Will your rocket get you to your destination in space?



Examples

6th grade- Social Studies

Using provided materials, create something that will change or impact **your world** or the world around you.

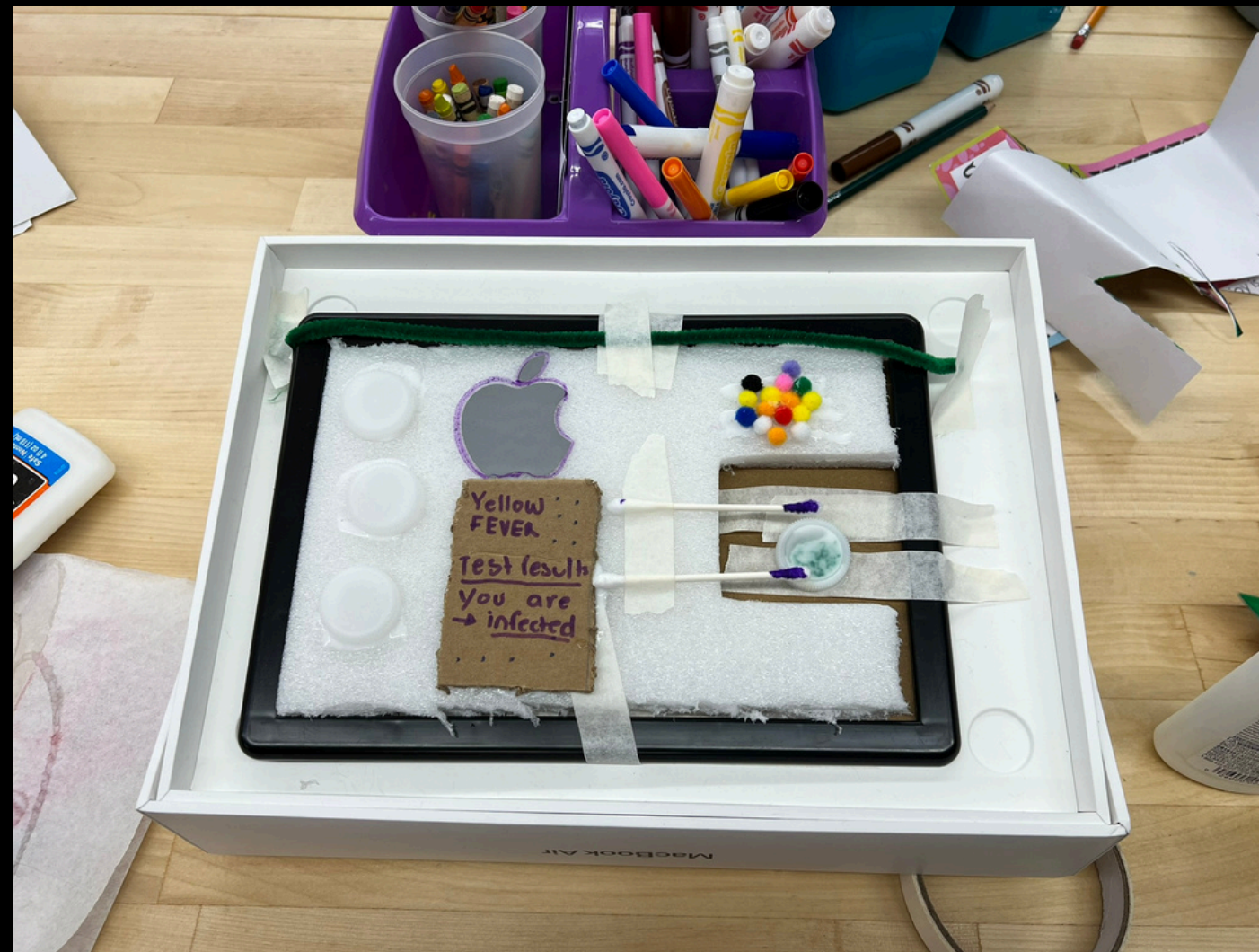


Examples

6th grade- ELA

Research and Essay Writing

Think about Walter Reed and the cause of Yellow Fever. Create something that will protect people from mosquito bites.



Examples

Junior High- Geography Club

Today you are going to work together to build the fastest sailing ship using the materials provided.

-To race, one person will power the ship by blowing through a straw

*The ship must travel at least 2 feet in the water

*Ships must be between 5" and 6"

*You do not have to use all of the materials

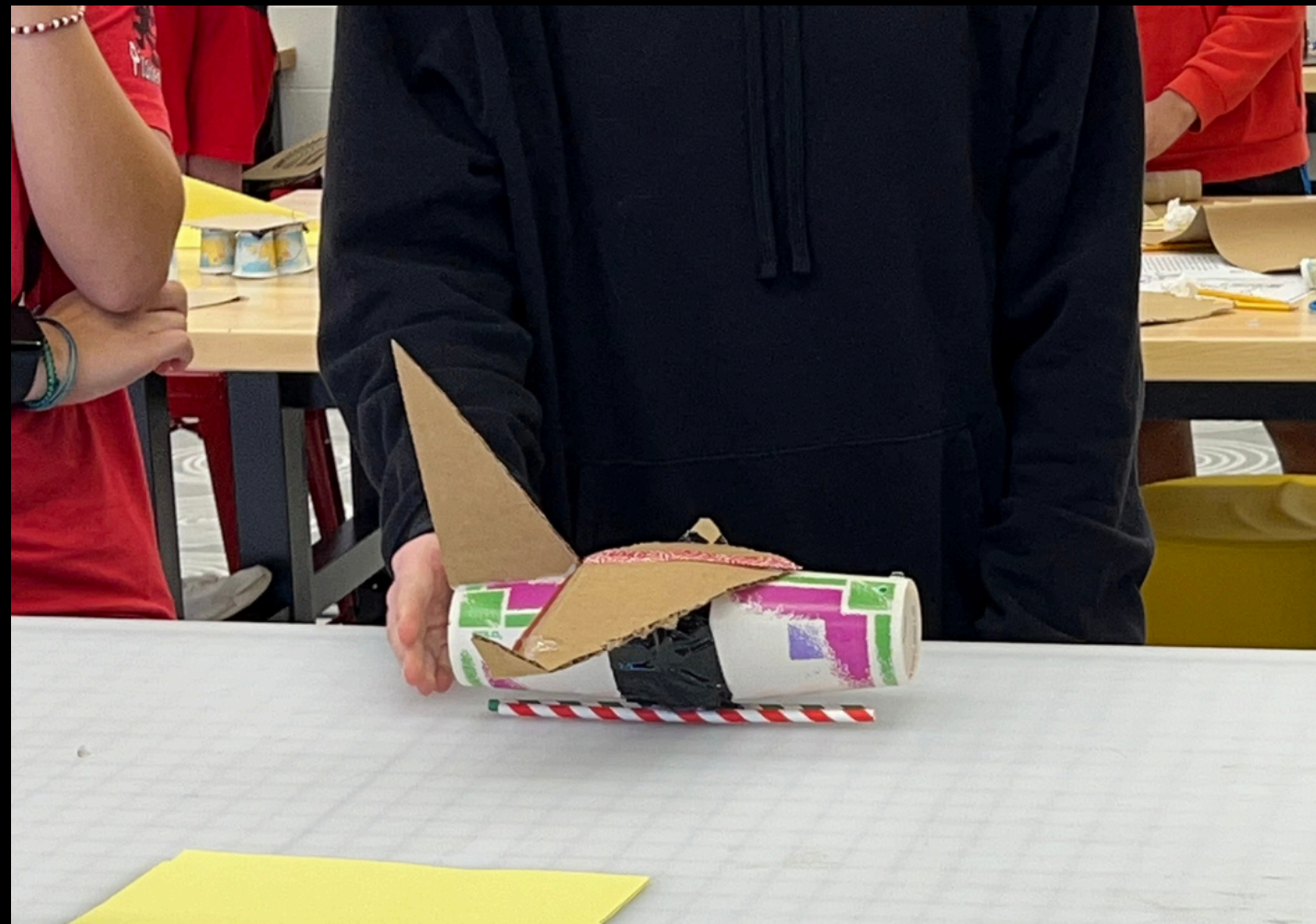
Brainstorm → Build → Race → Modify (if time) → Reflect



Examples

High School- History

Flight through the years



Examples

High School- History

Create a system to filter water



Examples

High School- ELA

Study of The Odyssey



Reflection

- Problem- Solving
- Resilience
- Academic Standards
- Future Ready Skills
- Collaborative Dynamics



Your Turn to Explore!

Take a few minutes and be creative! Use your imagination and build something with the provided materials.



Closing Reflections/Questions?



Emily Byers

byersem@japioneers.org



Thank you!