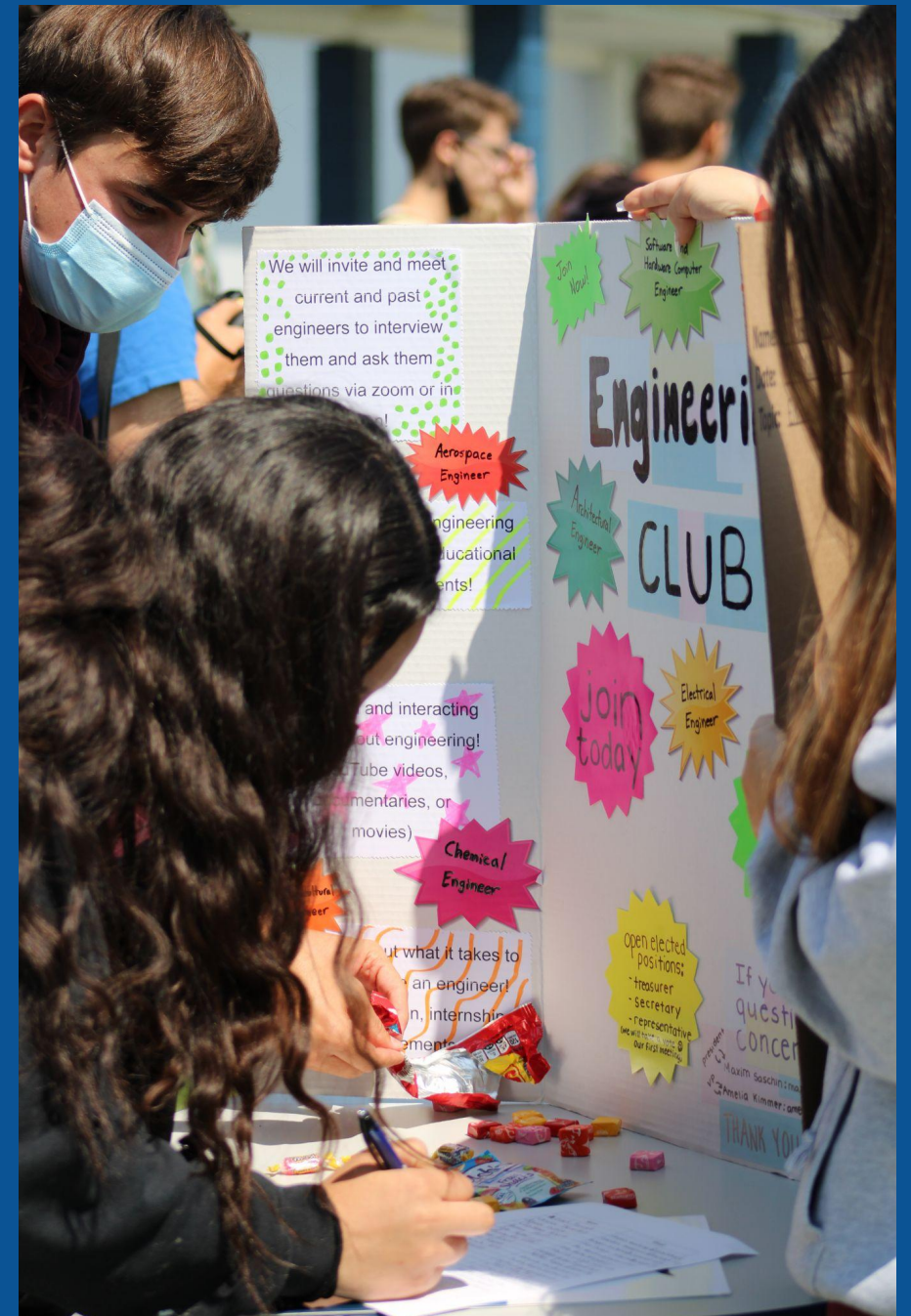
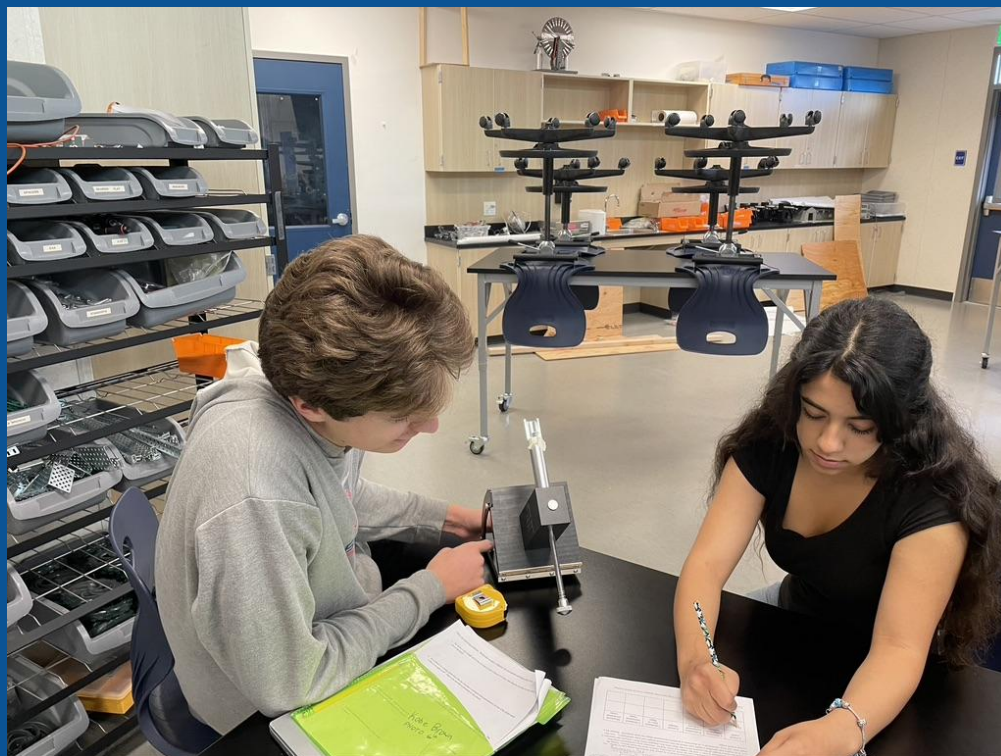


Math, Science, and Engineering

A Rigorous Hands-On Science and Engineering Program

- Integrated cross-curricular units of study
- Project-based learning
- Focus on collaboration, critical thinking, communication & creativity



Math Offerings:

- Algebra 1
- Geometry
- Algebra 2 or Algebra 2 Accelerated
- AP Statistics (0 Period)
- Pre-Calculus
- AP Calculus
- Math Support

A minimum of 3 years of math is required for graduation.

Sample Pathways:

- Algebra 1 – Geometry – Algebra 2 – Precalculus
- Algebra 1 – Geometry – Algebra 2 Acc – AP Calculus AB
- Geometry – Algebra 2 – Precalculus or AP Stats – AP Calculus AB

(AP Statistics can be taken alone or concurrently with Precalculus and AP Calculus)

Science Offerings:

- Engineering and Physics (9th)
- Biology (10th)
- Chemistry (11th)
- AP Biology (11th/12th)
- Anatomy and Physiology (11th/12th)
- AP Environmental Science (11th/12th)
- AP Chemistry (12th)
- AP Physics (11th/12th)

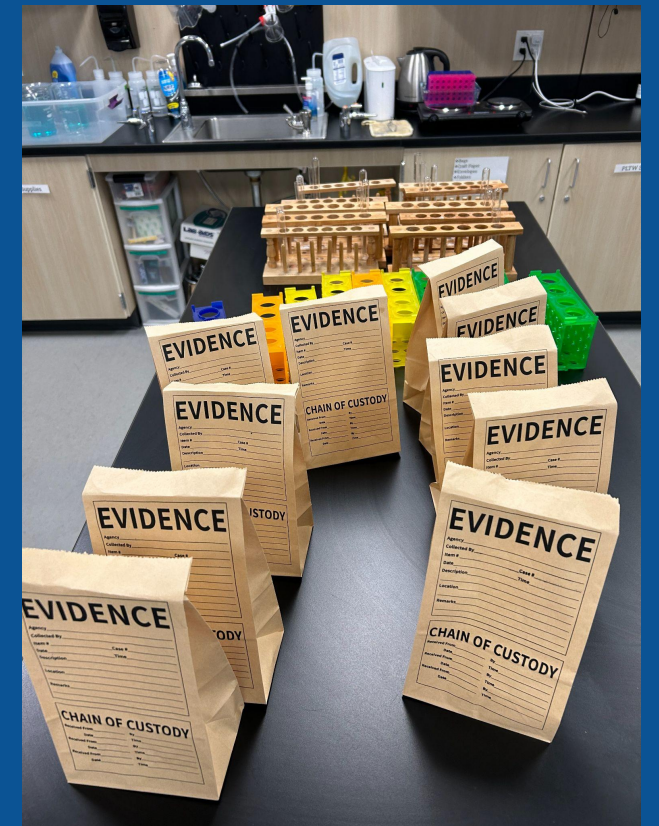
Biology and AP Biology



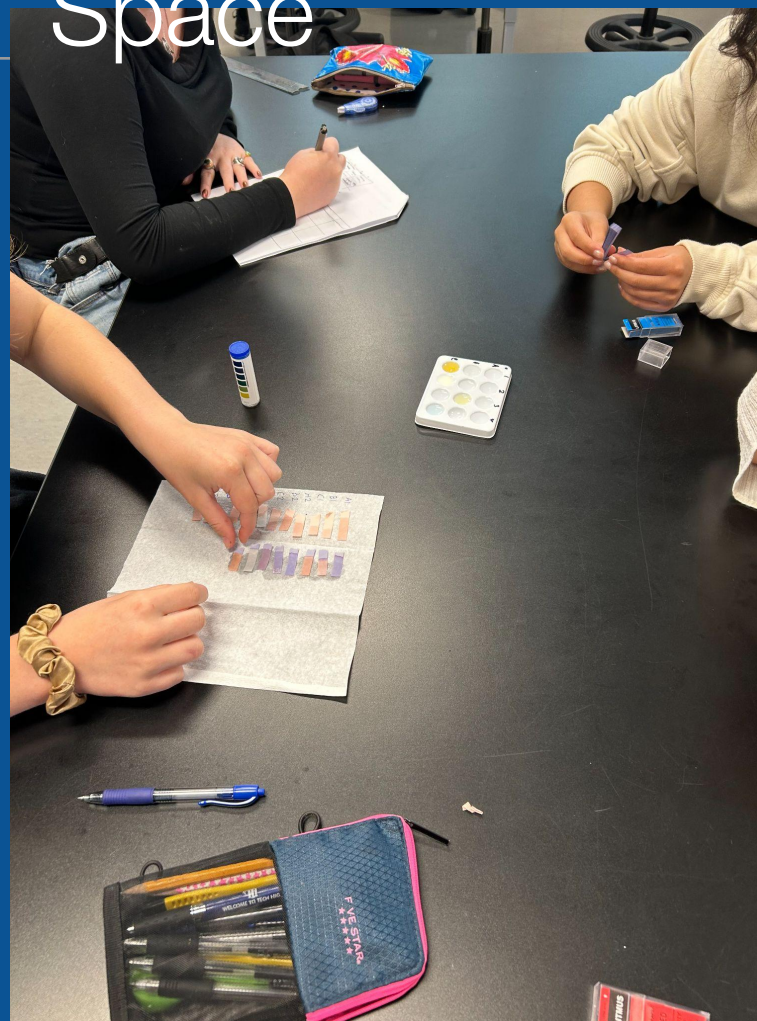
Tabletop models of
cell membranes



Seeds from
Space



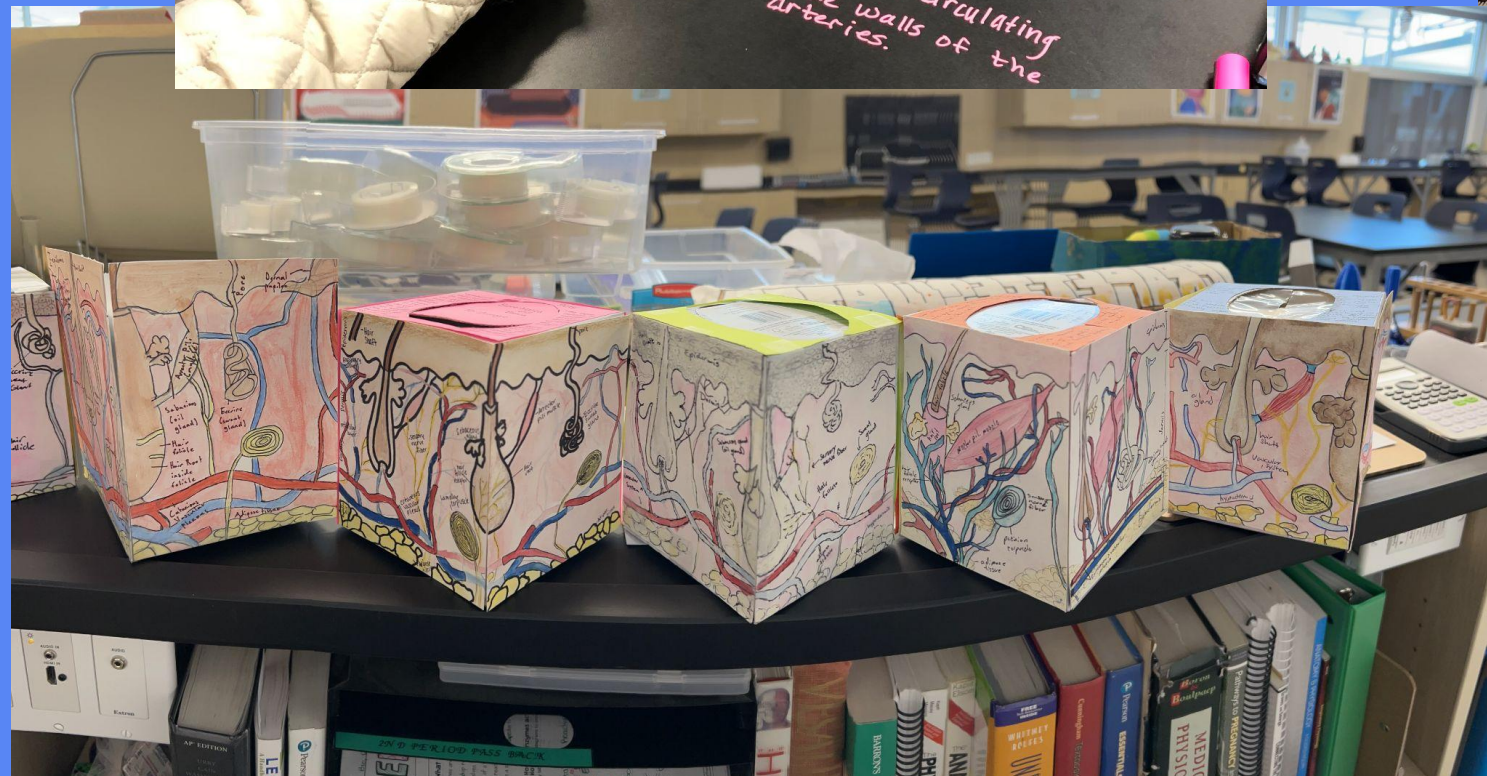
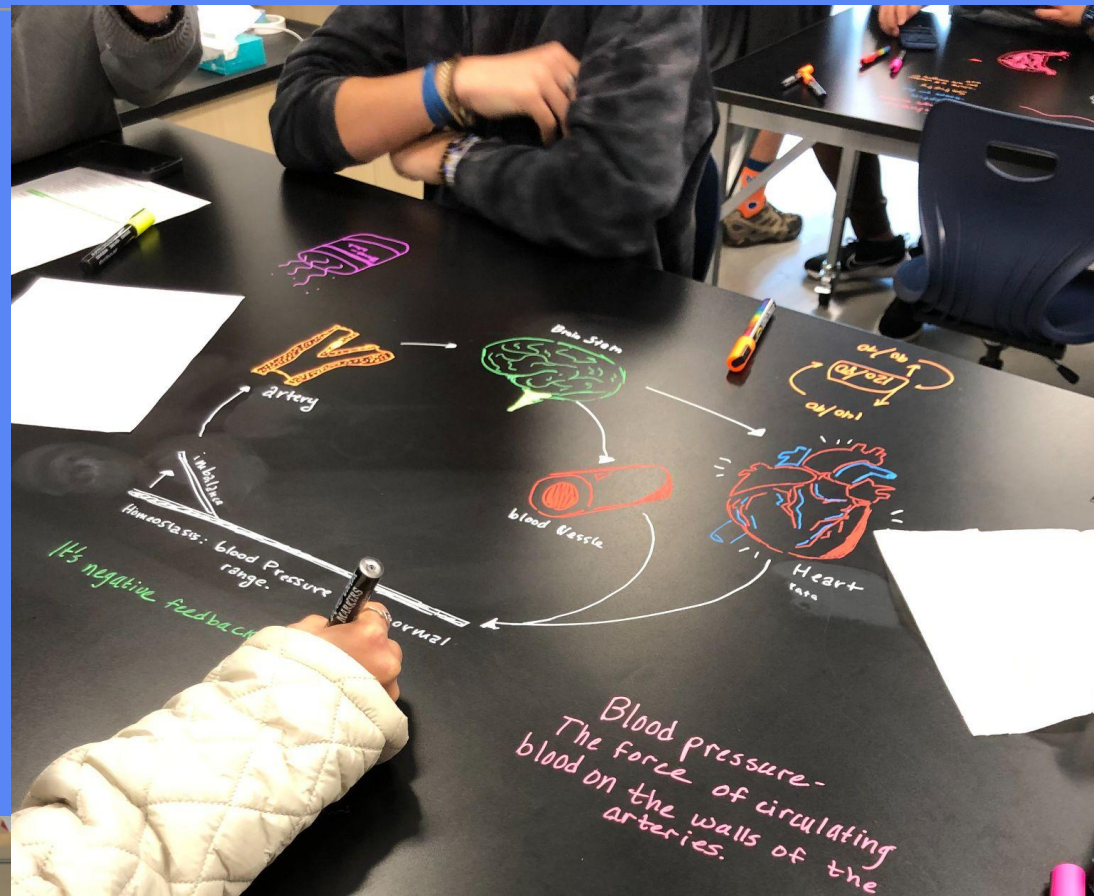
Macromolecule
Murder Mystery



pH Testing Lab

Anatomy & Physiology

Erin Dekleva



3D structures of skin models, kidney dissection, feedback loop tabletop diagrams

AP Environmental Science

Students collecting pond water for oxygen monitoring



AP Physics I - 11th and 12th Grade

Algebra 1 based Physics
Mechanics through Fluid Dynamics



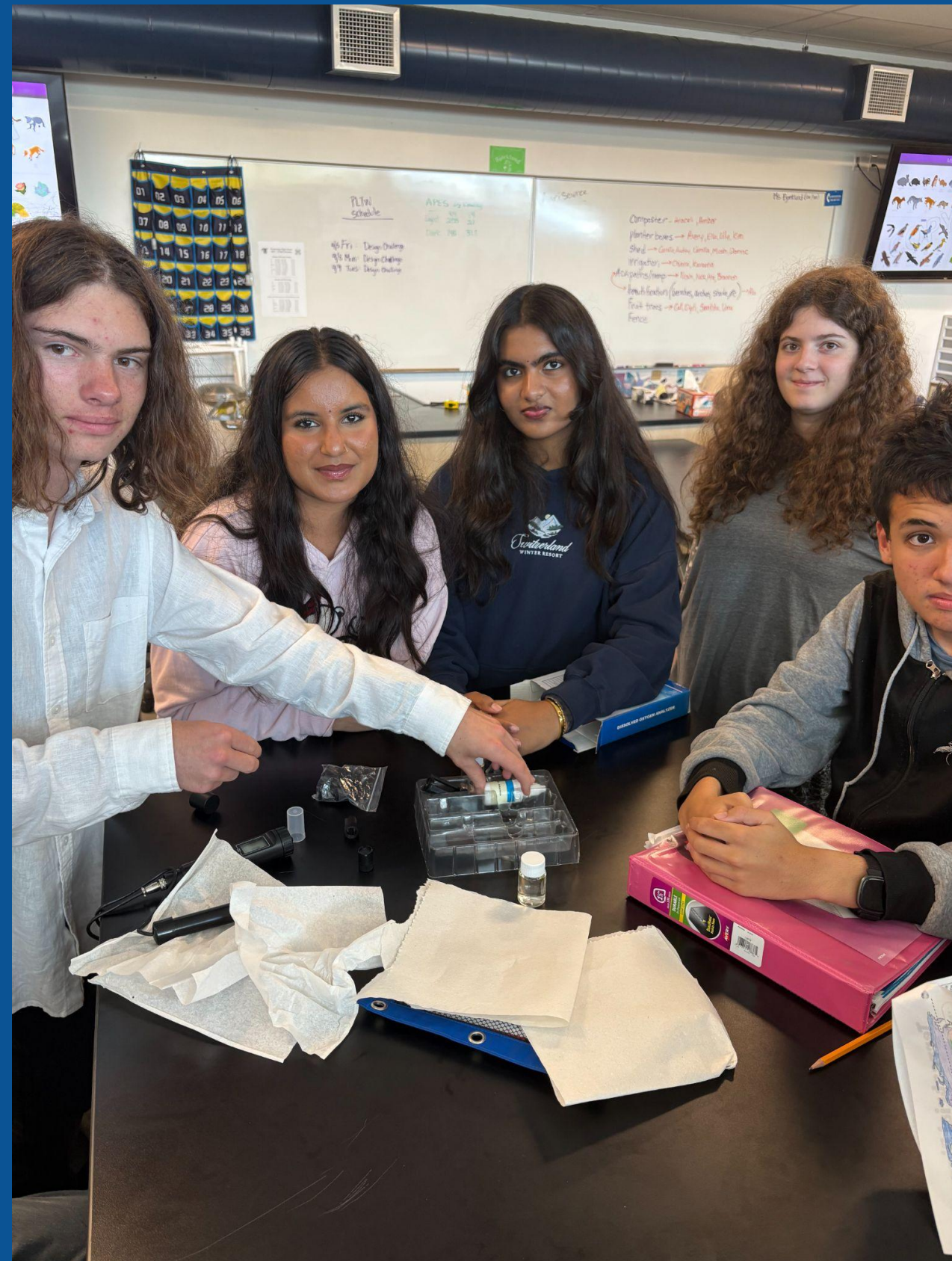
The boys try to drag the car
without physics (brake set)

The girls apply physics and
WIN!!! (brake set)



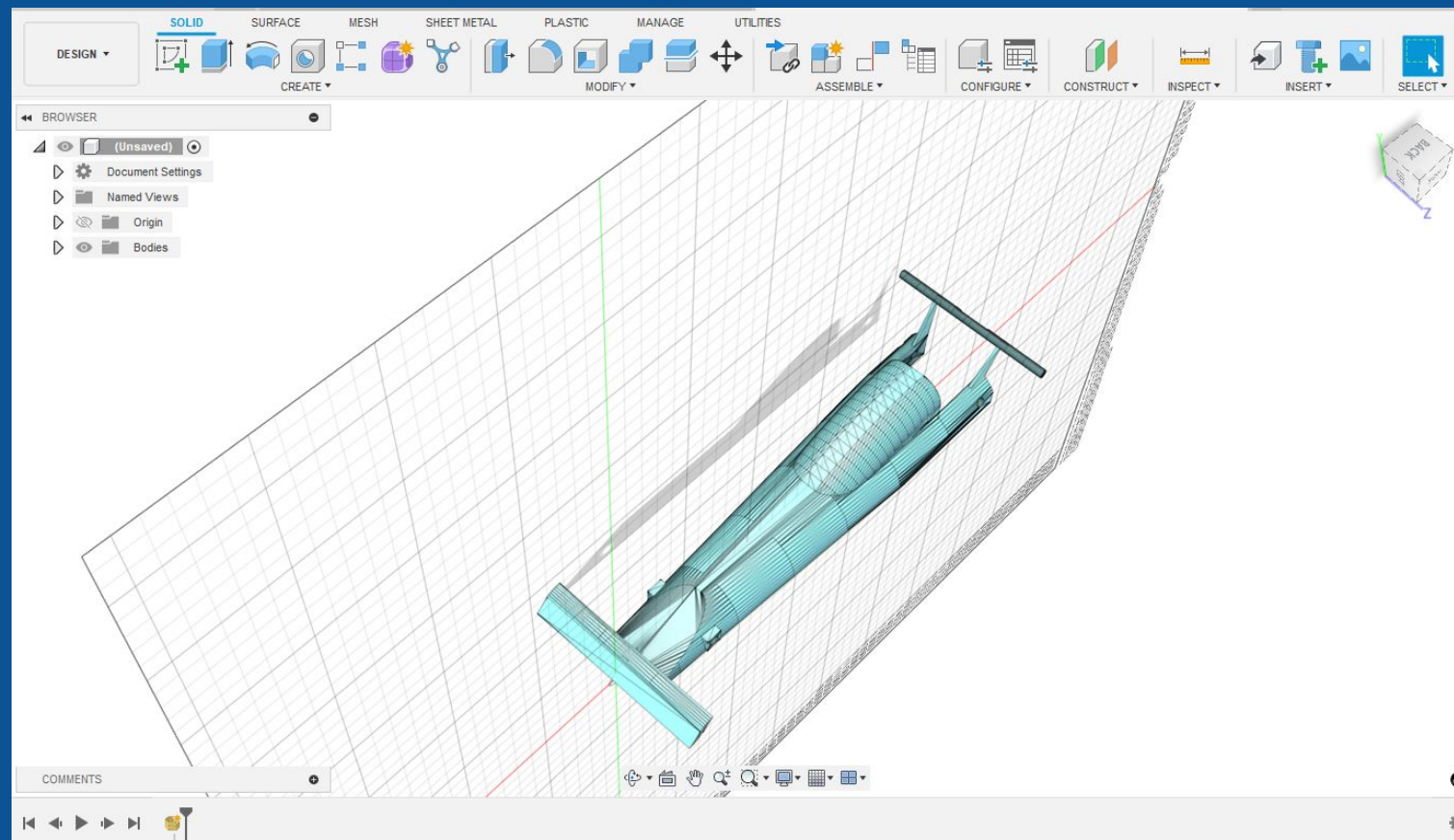
AP Chemistry - 12th Grade

Chemistry prerequisite



Engineering Offerings:

- Engineering and Physics
- Environmental Sustainability
- Agriscience Design & Development
- Engineering Design & Development



Engineering & Physics

CAD and 3D Printing

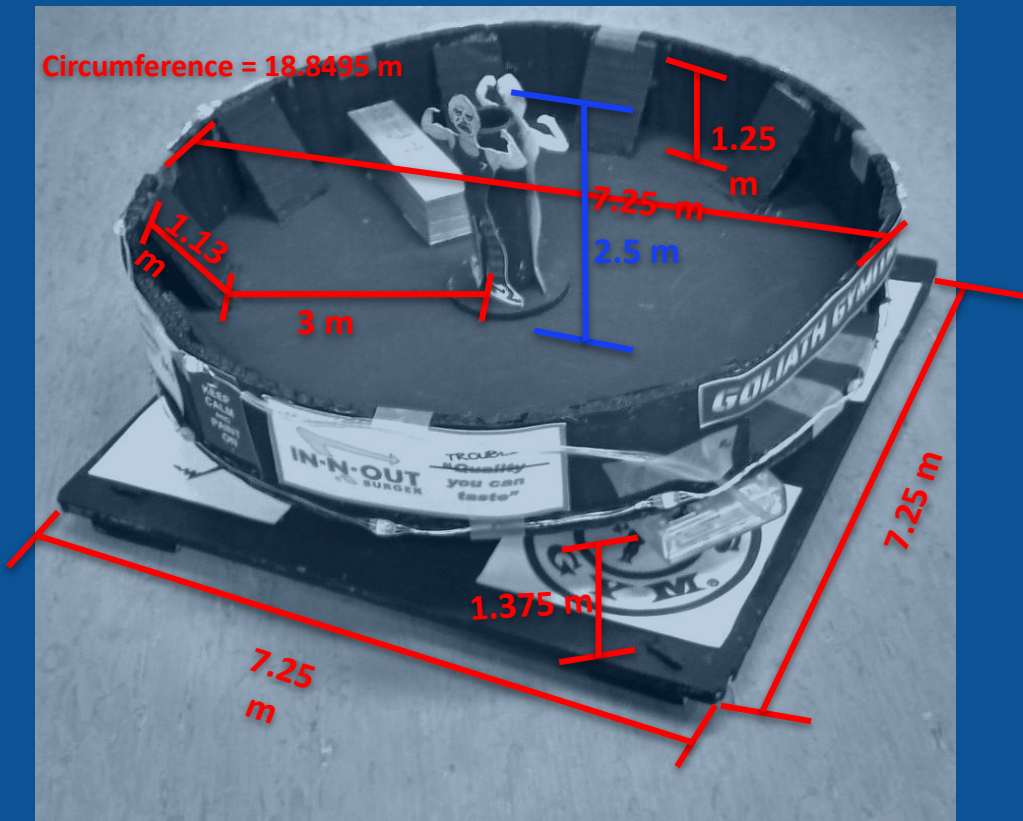
Rube Goldberg

Dr. Evil's Unamusement Park

The Five Tones

Siege

Engineering Invention



Goliath Gymitron

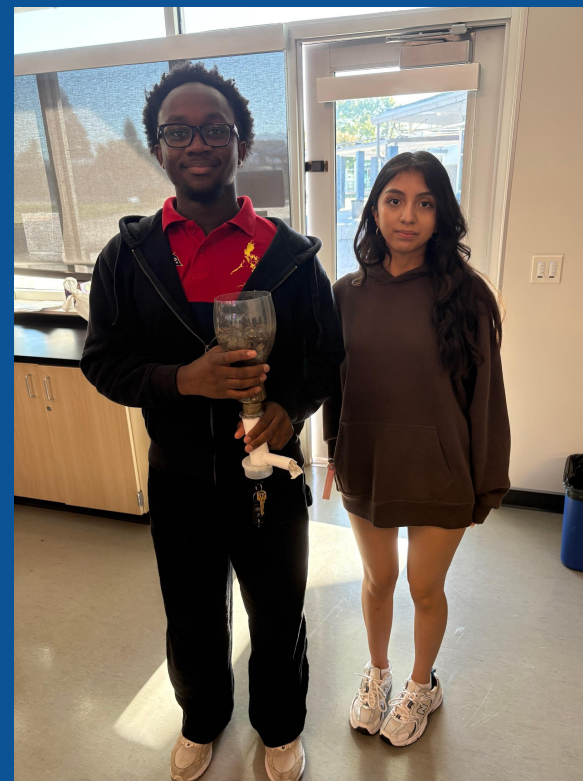
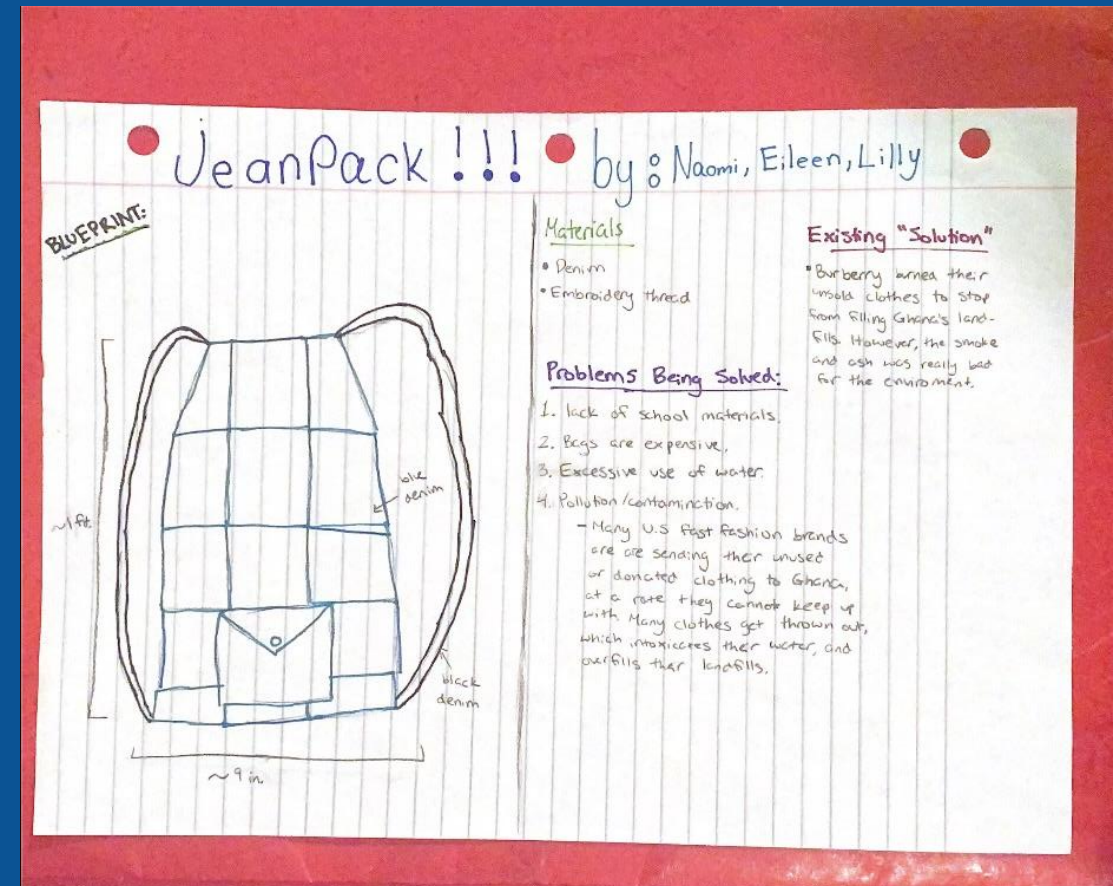
Movie Night

Environmental Sustainability

Students identify various different biological processes and determine ways to utilize these concepts to generate alternative energy and increase efficiency.

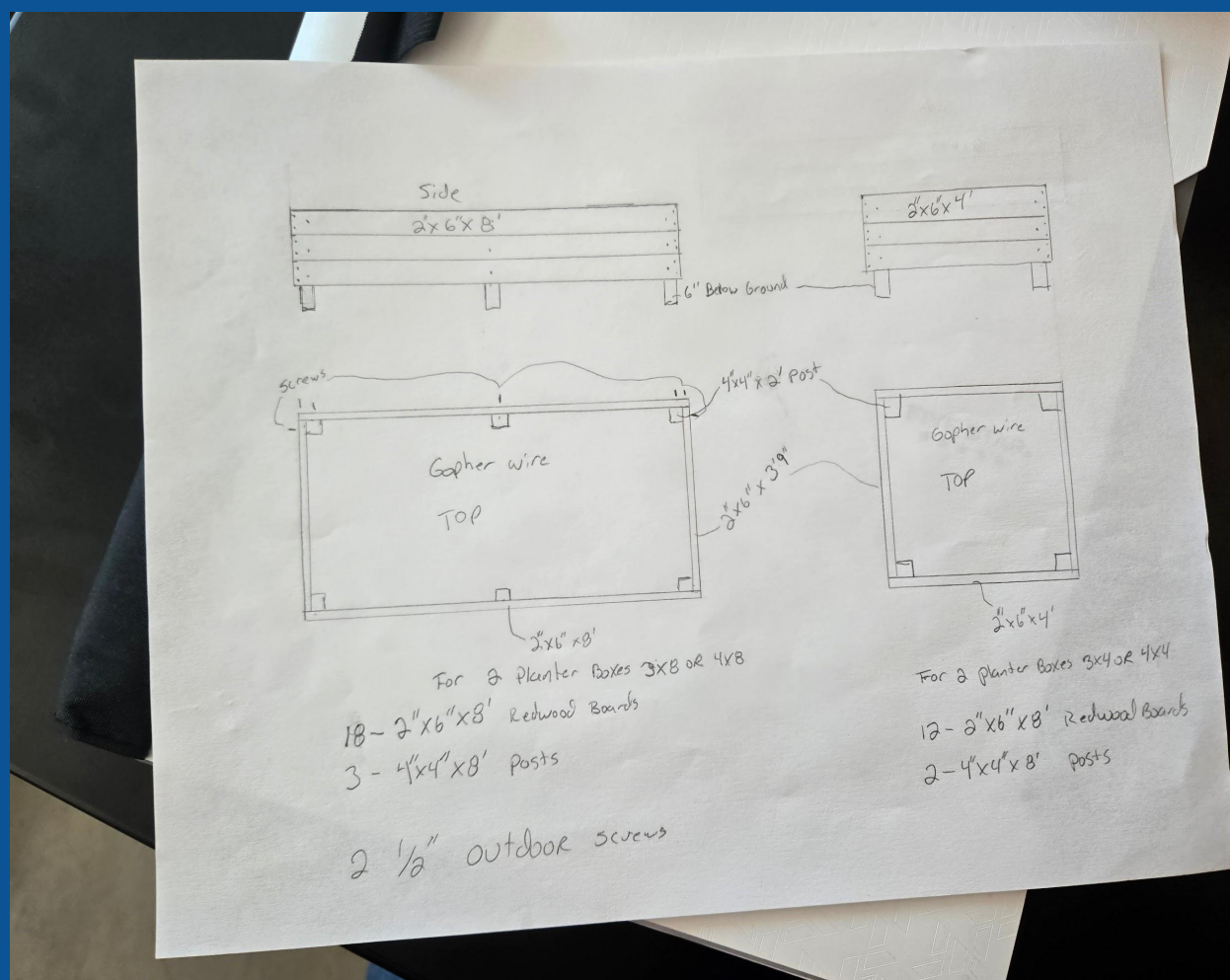
Projects include:

- *The Reinventing Use of Materials Design Challenge*
- *Biotechnology/Gel Electrophoresis*
- *Water Quality Testing*



Agriscience Design and Development

Designing planter boxes for a school garden project

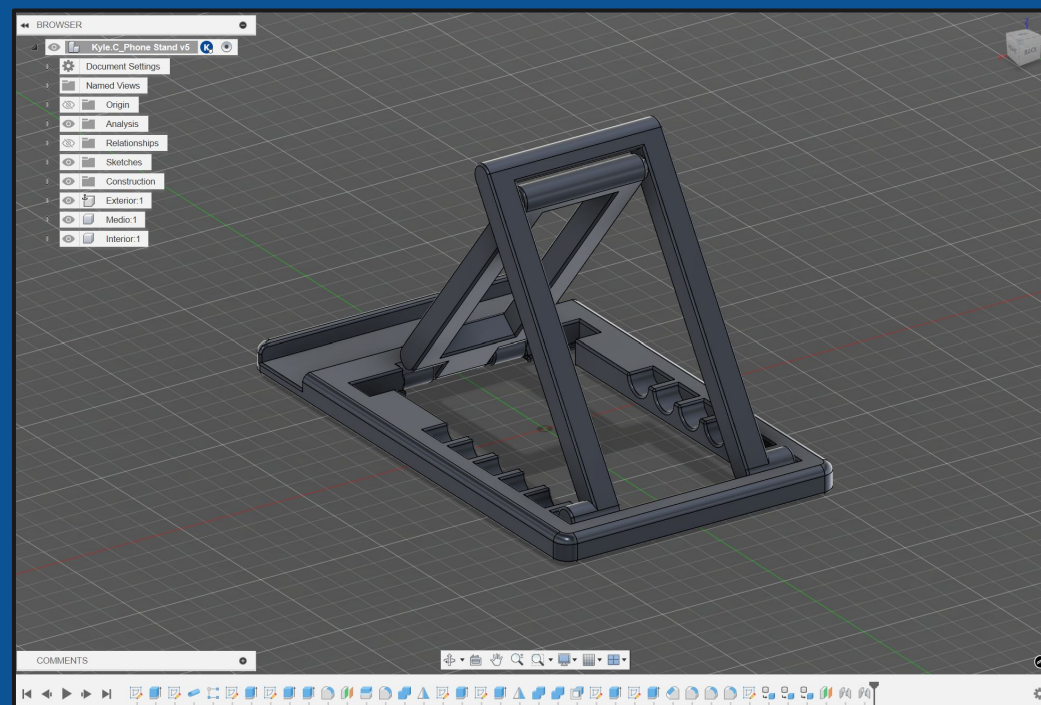
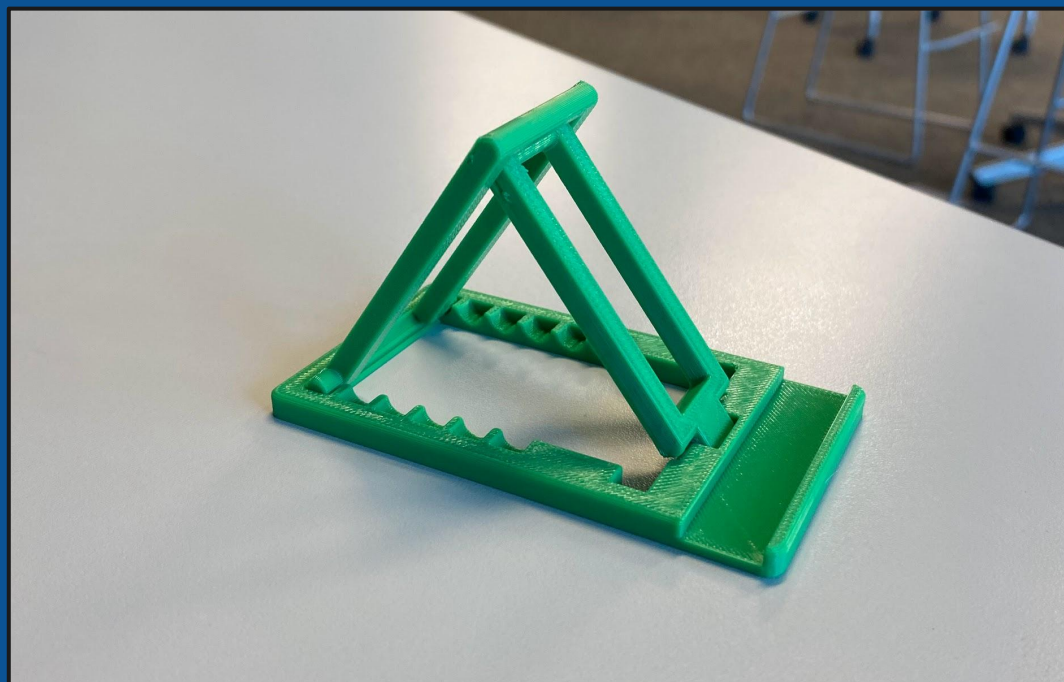


Engineering Design & Development

1st semester: Problem Solving and Design Challenges.

2nd semester: Concept to Prototype Project Development

- Students design & construct solutions to a variety of engineering challenges
- Concept to Prototype: Identify real-world problems & engineer solutions, following the engineering design process



AP Computer Science

Career and Technical Education (CTE) Pathway

AP CS Principles 3rd Science; Algebra I mastery req'd

AP CSA Advanced course (Java)

- Project based (individual and group)
- Courses taught by a 15-yr software engineer

