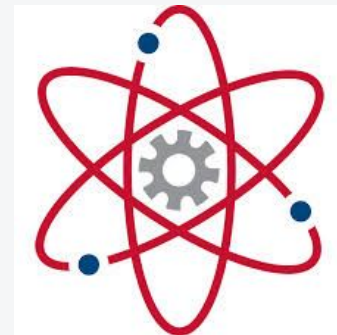


WELCOME TO

STEM!



VOLUME UP!



Career Tech PLTW Pathway - We Accept All Students!

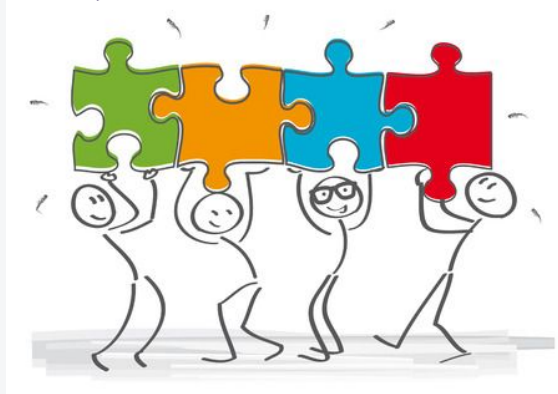
Career-technical education does not discriminate on the basis of race, color, national origin, sex, disability, or age for participation in any program or activity. Lack of English language proficiency will not be a barrier to admission and participation in career-technical education programs.

*If you'd like this information translated into another language, please let your Counselor know.

What is the STEM Team?

Students and teachers who work together as a cohort

Worthington has crafted a Freshman Team that honors the value of that timeless knowledge while engaging students in a dynamic, modern curriculum.



- More support transitioning from MS to HS
- Team teachers work together to help you be successful
- Sense of belonging for both students and parents
- Learning & problem solving for all interests and career paths - math, science, technology, medicine, engineering
- Excellent college preparation

Freshman Year at TWHS

The STEM Team

1. English
2. History
3. **Biology**
4. Elective (Typical Global Language)
5. **Lunch & Study Hall with team**
6. Math
7. **Introduction to Engineering**
8. Elective

*Elective can also be an additional study hall.

- You select to be on this team.
- You share the same teachers as all members on the team.

Everyone Else

1. English
2. History
3. **Physical Science**
4. Elective (Typical Global Language)
5. **Lunch & Study Hall/Large Space**
6. Math
7. Elective or Study Hall
8. Elective

- Students, not on the STEM team, will be divided randomly among high school teachers.



Other Interests and Classes

Example 4 Year Plans

Music, Theatre
and Art

World Language

EBA

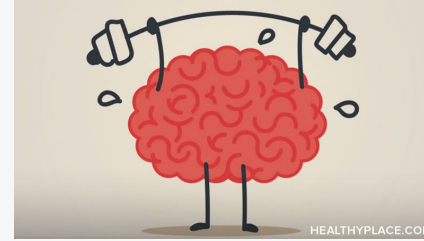
Linworth

Graduation Requirements

Social Emotional Strengths

STEM Classes

- Like-minded students
- Academically Motivated
- Community feeling



Non STEM Classes and Electives

- Spread out randomly with the other 1700 kids at TWHS
- All other electives will have non STEM students
- Foreign Language
- Music/Art/Theatre

Anyone on STEM will be in the same classes!!

6



-



(and

- want)
lunchroom



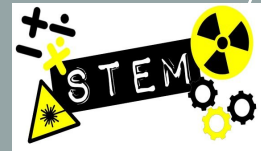
Team Environment and Expectations

Rigorous pathway
Behavioral expectations
HS = more work than MS
Soft Skills

Team teachers meet weekly. We monitor and make adjustments if we notice workloads are too heavy or too light.



Classmates:
Academically centered/motivated
Involved in extracurriculars





Resources and Technology

Technology

- Desktop computers
- Chromebooks
- Printers
- 3D Printers
- Fab Lab Equipment
- Project Materials



Resources

- Team Teachers
- Enrichment
- STEM Club
- Honda and CSCC Partnership
- U of C Engineering Visit
- OSU
- College Credit
- Science Advancement




```

graph TD
    1[1. Define Problem] --> D1{Problem Valid and Justifiable?}
    D1 -- No --> 1
    D1 -- Yes --> 2[2. Generate Concepts]
    2 --> D2{Needed Technology Exists?}
    D2 -- No --> SRN[Scientific Research Needed]
    SRN --> 3[3. Develop a Solution]
    D2 -- Yes --> 3
    3 --> D3{Is Solution Valid?}
    D3 -- No --> 3
    D3 -- Yes --> 4[4. Construct and Test Prototype]
    4 --> D4{Is Prototype Valid?}
    D4 -- No --> 4
    D4 -- Yes --> 5[5. Evaluate Solution]
    5 --> D5{Solution Solves Problem?}
    D5 -- No --> 4
    D5 -- Yes --> 6[6. Present Solution]
    6 --> PI([Product Innovation])
    PI -.-> 1
  
```

Decision Matrix

Problem

	Rating	Silly Guts	2019	Sneaking on the Bus	Junk on the Bus	Bullying Joke	Rating	Rating	Rating
Specifications									
Does not make a sound or make the noise up to at least 5 feet		10	0	0	0	10			
The toy must be able to do something related to the bus		10	0	0	0	10			
PLTW also want an additional feature that involves an AI program		5	10	0	10	0			
The toy must not exceed 2"x2"x2"		0	10	10	10	10			
PLTW also want it to be a limited class		0	10	10	10	10			
Complete our safety requirements		0	10	10	10	10			
TOTAL		25	40	30	30	40	0	0	0

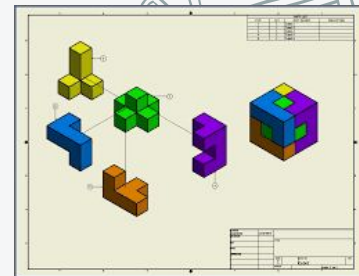
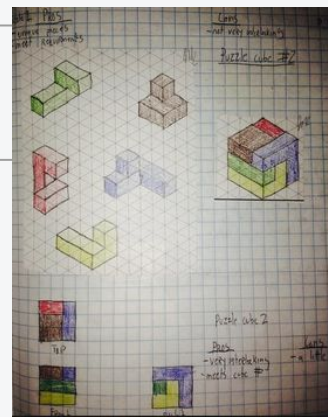
Give a descriptive name for each concept

Use consistency from design sheet

Rate each concept on each specification

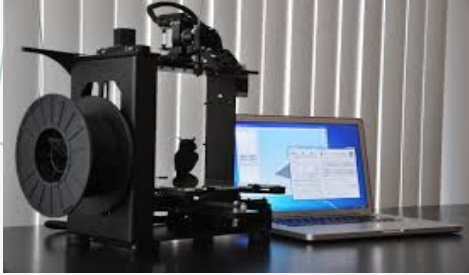
Rate up or below

Score: 1 = best 10 = great



- **Figure things out!**
- **Logical processes to solve problems**
- **Tools and technology education**
- **Access to innovative experiences only in the STEM program**
-
- **Challenging in a good way**

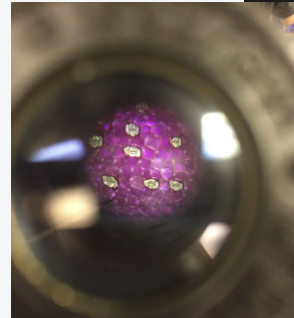
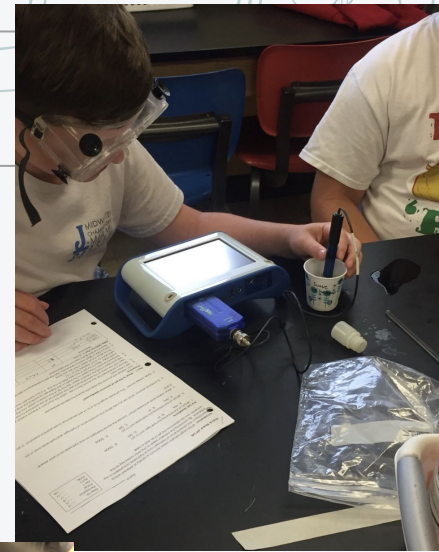
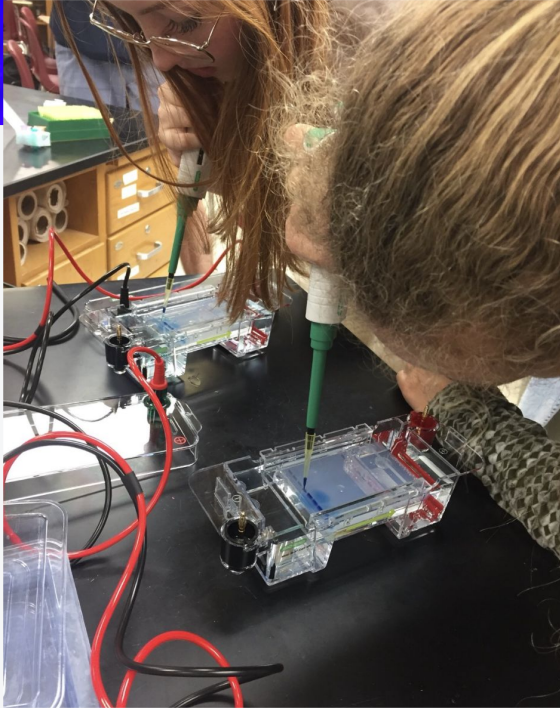
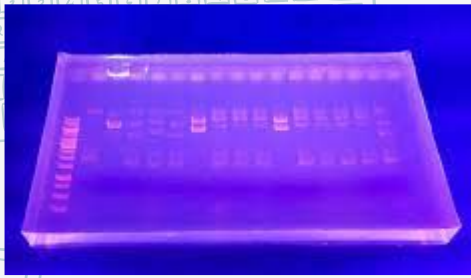
Engineering Lab



Dream it? Build it!!



STEM Biology



EXCLUSIVE Labs - only STEM Bio students get to do these!





Why would you choose the STEM Team again?



- STRONG preparation for future success
- Team of teachers working together
- Sense of belonging for both students and parents
- Safe and nurturing environment
- College Credit





Do you want to see some of the projects that STEM students do?



[Freshman STEM Team - Make More Video](#)


[PLTW Video - Info About IED - 2021-22](#)

[PLTW Video - Info About PLTW Courses - 2021-22](#)

[PLTW Video - Info About Women in Engineering - 2021-22](#)



Do you have a question about the program that wasn't addressed in this presentation?



Contact Bryan Brown
Introduction to Engineering Teacher
bbrown@wscloud.org

