Foundations of Engineering and Technology

Wheeler HS Fall 2018

Mr. Mars Berwanger

Syllabus & Student Questionnaire

Graffiti Walls

► Walk around the classroom and complete the sentences on the 6 posters: (just one word is OK!)

1. My favorite book/TV show is…
2. My favorite artist/band is…
3. My family is…
4. My friends would describe me as…
5. When I think of Engineering I think of…
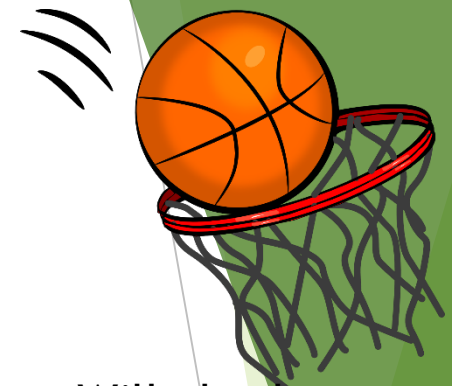6. Before I graduate I want to…
7. My summer was…

About Me

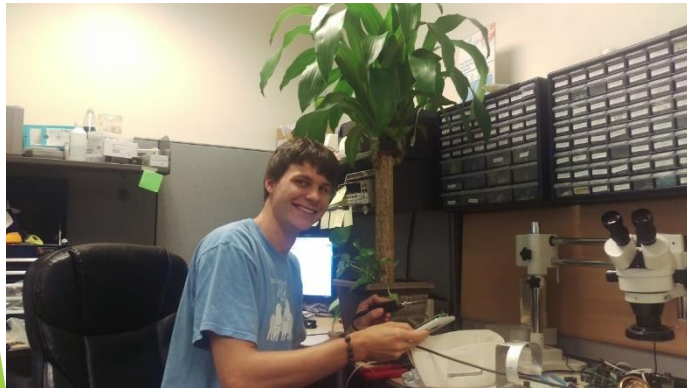Electrical Engineering from Georgia Tech

Two brothers, one sister, five nieces!

Will also be coaching basketball

Worked at Clean-Hands Safe-Hands for ~3 years (startup Engineering Company that monitors nurse's washing their hands in a hospital)

- Master's in Teaching from KSU
- Taught Geometry and Algebra II at THE Paulding County HS

Two bunnies (Coffee and Cream)

More Bu

Breakfast:

Dinner:

What is Engineering?

▶ Discuss with your table for three minutes and come up with a definition and examples

Definitions:

Engine-earings

Finding The most efficient

Way to make something work

Using the design process to find solutions to Problems

The Application of Technology

Using technology & science to Create something diff

Examples:

Engines on your ears

Electrical Cars

Cars

everything?

What is Engineering?

► Discuss with your table for three minutes and come up with a definition and examples

Definitions:

Making life easier

designing and building tools to aid people

CREATION OF MACHINES AND TECH

Solving world problems with tech.

building what scientists and designers want to happen

The use of math, science, and creativity to solve problems

building and repairing items

Examples:

Car

Bridge

BUILDING a "SUPERCAR"

Hydroelectric dams

Artistic buildings

Toaster

Motorcycle

What is Engineering?

► Discuss with your table for three minutes and come up with a definition and examples

Definitions:

building things & use
the of tech
advancement
in technology
using science to find creative ways to solve day to day problems
Innovation
taking ideas and figuring out to turn them into

Examples:

Mechanical engineering
aerospace engineering
Electrical Engineering
Civil Engineering
Biomedical

Engineering

- Formal definition:
  - the branch of science and technology concerned with the design, building, and use of engines, machines, and structures.
- My definition:
  - The process of using creativity and the scientific inquiry to solve real-world problems.

Artifact Assignment

- Bring any school-appropriate artifact you have from home that represents you
  - (ideally something small enough so you can easily keep it in your backpack, or already have in your backpack)
- Be prepared to share with the class what the artifact is and why you chose it!

To Do!!!

- Return signed syllabus by Friday (8/27)
- Return student-questionnaire by Monday (8/6)
- Bring any artifact to school tomorrow!