Engineering Lab

Mrs. Patterson

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Contact me:



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"Engineering is the application of mathematics, empirical evidence and scientific, economic, social, and practical knowledge in order to invent, innovate, design, build, maintain, research, and improve structures, machines, tools, systems, components, materials, and processes."

Wikipedia

CLASS MATERIALS

Required:

- ☐ Composition Notebook
- □ Pens and Pencils
- ☐ Folder

CLASS DESCRIPTION

Engineering Lab will explore the fields of Science, Technology, Engineering, and Mathematics. In each unit we will apply the engineering process and find solutions to real world problems.



1. Define the problem.

2. Research the problem,

- 3. Develop a solution.
- 4. Design the solution.
- 5. Build a prototype.
- Test it.
- 7 Fyaluate the solution





Expectations

- 1. Participate!
- 2. Ask Questions.
- 3. Work as a team.
- 4. Consider all ideas.
- 5. Be good listeners.
- 6. Bring all of your supplies to class daily.

GRADES



Participation . Iournals

Grades are divided into two categories - Class participation and Lab journals. Your participation grade includes STEM labs and group projects. Your lab journal grade includes keeping detailed notes through the engineering design

process.

- 1. We will open class with watching a short video of engineers and innovators at work.
- 2. I will briefly introduce the lab or group project.
- 3. The majority of the class will be spent in hands-on inquiry and openended exploration.
- 4. We will finish class by debriefing- reflecting on what we learned in our lab.



Mrs. Patterson

ASSIGNMENTS



Homework will be assigned periodically. These assignments will include watching a posted video in preparation for a STEM Lab or group project. There will also be Lab Journal checks once a month. All videos will be posted on my page on the PRA website. All assignments will be posted in Google Classroom

ABSENTEE POLICY



If you are absent from
Engineering Lab you will not lose
participation points. When you
return to class you need to view
the video that corresponds to the
lab or group project we are
working on and join a group.