

# The Engineering Design Process



## 1) DEFINE THE PROBLEM

Ask questions like...

- What is the problem?
- Who is it a problem for?
- What are my criteria and constraints?

## 2) IDEATE A SOLUTION

- Brainstorm as many ideas as possible
- Select your favorite idea
- Sketch it out and make a plan

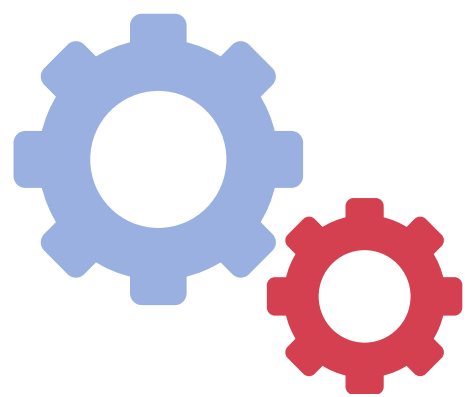


## 3) CREATE A PROTOTYPE

- Build a first draft of your solution
- Focus on creativity and making a product, not perfection

## 4) TEST AND EVALUATE

- Test your prototype
- Take notes of what works and what doesn't
- Share your work with others for feedback



## 5) REFINE YOUR PROTOTYPE

- Take what you've learned and create a plan for improvement
- Make improvements and repeat these steps until you're satisfied with the final result!

### SOURCES:

<https://www.teachengineering.org/design/designprocess>  
<http://web.stanford.edu/~mshanks/MichaelShanks/files/509554.pdf>  
<https://oeta.pbslearningmedia.org/resource/eg-design-process/et-design-process/>