Lesson 10: Evaluate and improve

Note: Do this step when you are ready to dry your mycelium.

Objectives:

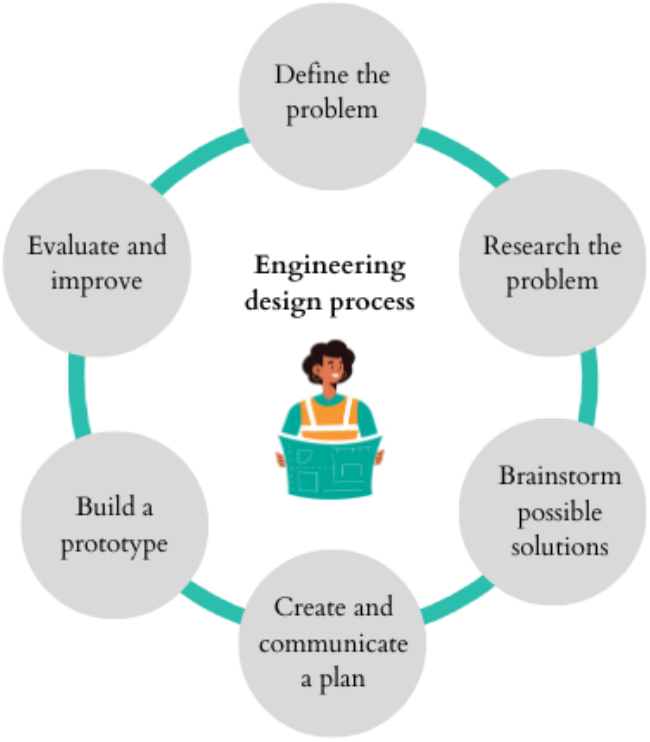
1. Measure contraction of the form.
2. Evaluate the outcomes versus desired criteria

Introduction:

Congratulations! You have made it to the final step of the engineering design process! It is time to evaluate the prototype you've built and see how it can be improved. When evaluating a prototype, you will want to consider whether you have met all of the desired criteria in the solution. Is it what you set out to achieve? Does it take into consideration all of the constraints? Does the design function as it needs to?

These are all questions to ask yourself as you dry your mycelium and remove it from the 3d-printed form.

Hint: When removing the mycelium from the form, it can help to use a rubber mallet.



Evaluate and improve:

1. Take the mass of the mycelium form before and after the drying process. When dry, the form should weigh 35% of its original weight. Use this as a target to see if you need to dry it more or not. Continue until it is fully dry.

Mass before drying:
Mass after drying:
Percentage:

2. Take photos of your finished growth form.

3. Write a reflection using the following questions:
    a. Were you able to pop your mycelium form out successfully? What does it look like now?
    b. Does the design function as it needs to?
    c. Does it take into consideration all of the constraints?
    d. What did you learn about yourself through this project?
    e. What was the most challenging aspect of this project? How did you overcome it?

4. Organize your work into a presentation which includes:
    - Project design brief
    - Multivew sketch of initial prototype
    - Fusion 360 document drawing of final prototype
    - Picture of 3D printed growth form
    - Picture of final mycelium desk organizer
    - Reflection