

MY MODEL MEMBRANE

By: AM 4/29/21

STEP #1 ASK

What is the problem?

I have to find a way to keep this frogs membrane moist and healthy.

What can be done?

I can build a model membrane to securely moisturize the frog and their membrane.

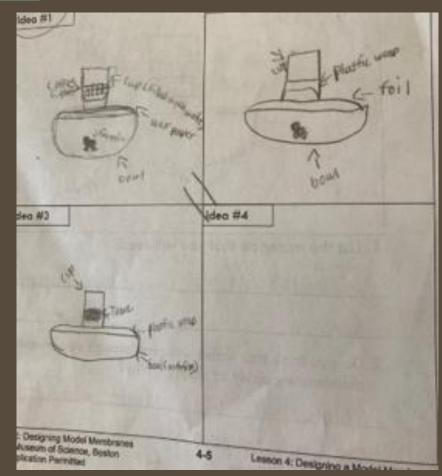
CONSTRAINTS

- Adding too much or not enough water
- Having a weak plan
- Surroundings (Sun, Dogs and Cats)

STEP #2 IMAGINE

- I ended up imagining 3 designs.
- My Most used material in all of the designs was plastic wrap.

Goal: Create a model membrane to safely moisturize the frog, In Order to meet this goal I will have to go through many trial and errors.



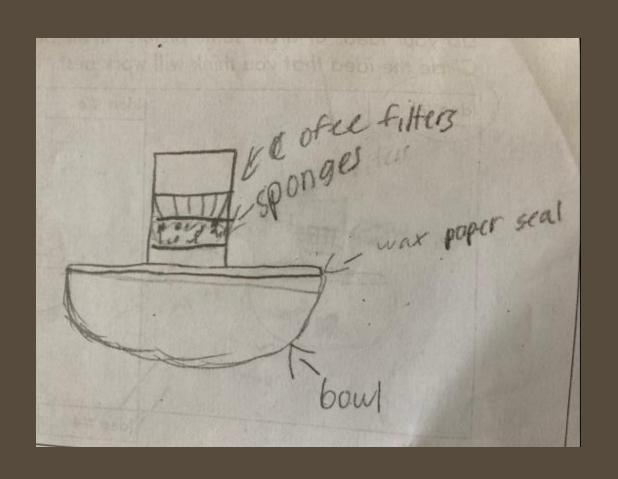
STEP #3 PLAN

My Initial Plan included these items: Idea 1

- 2 Coffee filters
- 1 Sponge
- Wax Paper

I used this idea because it seemed better to use more thinner items.

I do think there is a slight chance the water might pass through quickly but I doubt it.



STEP #4 CREATE

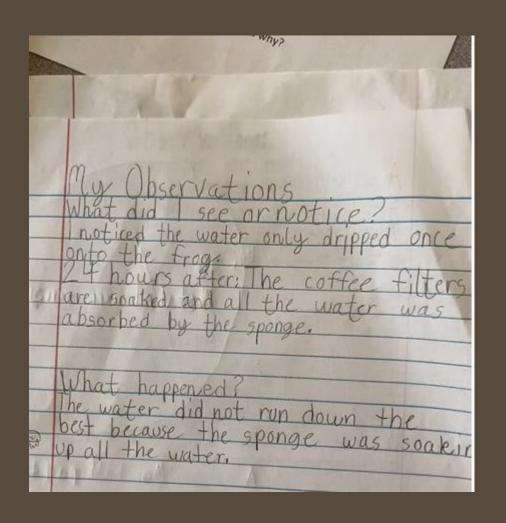
The Outcome wasn't what I was hoping for but that doesn't mean I wasn't close. It ran through slowly, too slowly only a few drops of water moisturized the frog.

I noticed in the cup that the coffee filters had been soaked of water and the sponge had nearly absorbed all the water.

I honestly don't know why this would have happened but I think the sponge absorbed most of the water so the water was trapped in the sponge and couldn't moisturize the frog well.

I didn't reach my goal, but I do think I was close because some water went on the frog but I don't think enough water fell to fully moisturize the frog.

STEP #4 CREATE PART 2



MY MODEL MEMBRANE TEST RUN



STEP #5 IMPROVE

I think I might take out the sponge and try adding some more coffee filters but I have not decided.

New Materials I might use:

- More Coffee Filters
- Cardboard?
- Toilet Paper

I only have 2 materials I won't use is a sponge and wax paper, I will not use wax paper because it seemed to rip easier and I don't want that. I will not use the sponge because it seemed to have absorbed all the water.

