Nitrogen Cycle Inquiry Lab

Task: In your group, you will design a structure so that nutrients in the nitrogen cycle flow through a bacteria, fish, and plant tank.

**Step 1:**

1. What are the products in the fish tank?
2. Which part of the nitrogen cycle was occurring in the plant tank? What are the reactants?
3. Which part of the nitrogen cycle was occurring in the bacteria tank? What are the products?

STOP! Call Ms. McDaniel over to check

**Step 2: Create your own nitrogen cycle**

Based on your answers to the previous questions, draw a cycle that would connect the three tanks.

**Step 3: Put your plan in action**

You will be designing a system that allows nitrogen to cycle throughout the three tanks. In order to accomplish this task, water will need to flow from one tank to another. There are two methods by which water can flow from one method to another:

1. tubing with an air pump
2. water falling over the edge of one tank into another ( use foam to create different levels)

In the space below, sketch out how you will design your lab.

Finally, list the materials your group will need to execute this lab: