Yunseo Kim / Dokyun Kim

A Living Ecosystem(AquaLife) at The Village School

Pictures:
https://drive.google.com/drive/fol1ders/13Q7b_MLeEMpn0S-UMAFmQBixwuu_BV3w?usp=sharing

Materials: fish tank, substrate, filter, lighting, aquatic plants, fish, driftwood, rocks, aquarium treatment chemicals, water container for water changes, and a few other items I'll need to recall.

Comprehensive Timeline

2025

September 20 – Began planning the aquarium project. Started by researching the necessary materials and the foundational knowledge required to set up and maintain a healthy tank.

October 1 – Started gathering materials.

October 2 – All currently needed aquarium materials have been collected. Laid down the substrate first, then placed the driftwood inside the tank. Finally, used a water filter to remove impurities from the water before adding it to the tank.

October 4 – All materials for the smaller fish tank have been gathered, and the basic setup—aquarium lighting, filtration system, and CO_2 supply for the aquatic plants—has been completed. Filled the tank with water as a first step and waited for the substrate to fully settle at the bottom.

October 6 – The essential conditions of a functioning aquarium have been established. The water is clear and circulating well, and the aquatic plants are growing without any issues.

October 18 – Since the tank now appears to satisfy the conditions necessary to sustain fish, visited an aquarium shop and brought home a single fish as a starting point.

October 19 – Performed water acclimation (drip acclimation) to help reduce the stress on the fish during its transition. After roughly three hours, released the fish into the tank to

verify that it could survive comfortably in the new water conditions, beginning with just one specimen.

October 20 – One day has passed, and the fish is alive and healthy. Began planning to bring home additional fish to introduce into the tank.

November 1 – Moved the smaller aquarium to the high school. Began maintaining water quality separately for both tanks—the one at the middle school and the one at the high school.

2026

March 1 – A student dropped food into the aquarium. The water became cloudy and water pollution occurred.

March 2 – Immediately performed a full water change with fresh water, and the water quality returned to a healthy state. To prevent this kind of incident from happening again, we decided to create a sign for the tank.

April 1 – Brought home several more fish and introduced them into the aquarium.

Village Aquarium



Est. September 20, 2025

Village Aquarium

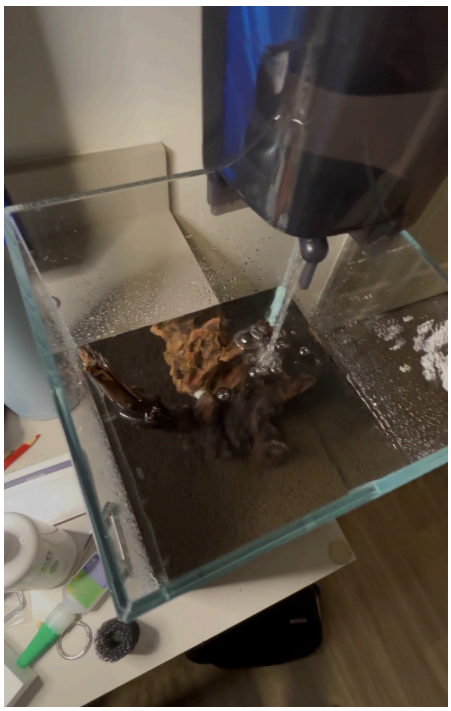


Est. September 20, 2025

Please do not put your hands or food in the fish tank.



- **December 2nd, 2025**







- **December 6th, 2025**





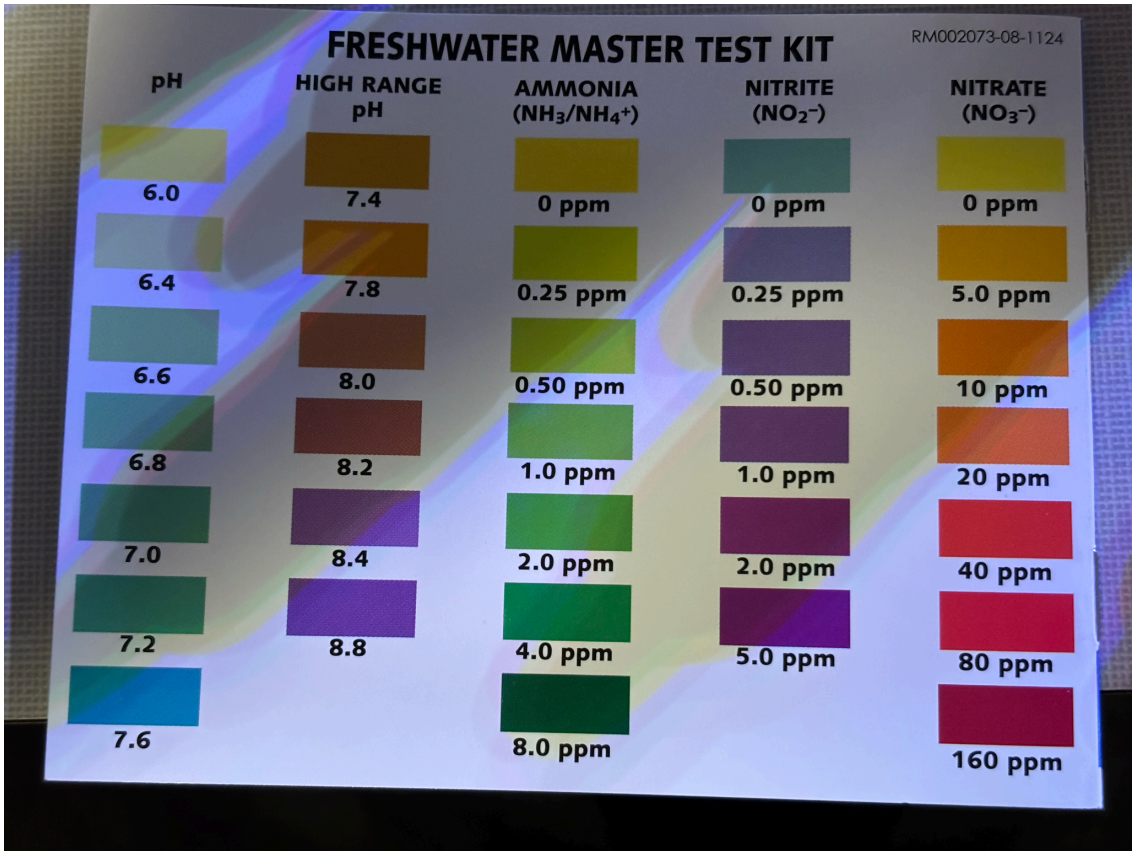




- **December 19th, 2025**







- **December 9th, 2025**







By Yunseo (Dokyun) Kim & Brian Kim

About This Project

This aquarium is part of Aqualife, a CAS project created by two students who wanted to share the quiet beauty of an aquatic ecosystem with the school community. We placed this tank near the cafeteria, one of the busiest spots on campus so that even a brief glance during the day might offer a small moment of calm and curiosity.

How It Started

We originally set out to build just this one small aquarium for the high school. After completing it, we realized how much we had grown to love the process, researching water chemistry, designing the layout, and watching a living ecosystem take shape. What began as a single project became a genuine new interest for both of us.When we learned that Mr. Bill was planning to install a large aquarium in the middle school cafeteria, we joined the effort. Over several weeks, we helped plan, source materials, and build that tank as well. The full installation took about two weeks of hands-on work.

What's Inside

A complete miniature ecosystem, including:
Substrate – the base layer that supports plant roots and beneficial bacteria
Filtration system – keeps the water clean and well-oxygenated
Lighting – supports plant growth and brings out the colors of the tank
Live aquatic plants – produce oxygen and help maintain water quality
Fish – the heart of the ecosystem

Our Hope

We hope this tank reminds you that even small ecosystems deserve care and attention. Take a moment, watch the fish, and enjoy.