

# **REUSABLE, RENEWABLE GREENHOME!**

**Head Environmentalist of Freeman High School, Charlotte Holloway**

## ***WHO AM I?***

Hello! My name is Charlotte Holloway. I am a senior at Freeman and a 17-year-old aspiring Environmental Scientist! When I'm not working on my Greenhome, I'm usually practicing show choir, marching band, writing something for Model UN, or working on the Maverick Historian (Freeman's Yearbook)! I've worked with my AP Physics II teacher, Mr. Altman, on this green home since the end of the 2022-2023 school year. His students last year constructed part of this greenhouse and ever since, Mr. Altman and I have been adding to this wonderful Greenhome in different ways. I hope you enjoy this article and learn something new about how you can help our environment!

## ***THE "GREENHOME"***

My goal for this Greenhome is far too extensive for one small article. However, my goal for this article is to explain to my audience how I was able to efficiently create a successful compost! The Greenhome is made from completely reused materials. The whole frame was created with wood from a physics teacher's home renovations at Freeman, Mr. Gallo! The "glass" you see on the outside is actually old plexiglass the Freeman used during Covid. Even the reusable rain feature is made out of some bent and sawed plexiglass and a bucket to catch water donated by Mr. Foltz!

## ***COMPOSTING!***

So, how do you compost? Well, there are three basic components you need in order to construct a successful compost: Soil, brown, and green. Brown can range from anything from an old cut-up Amazon box to old newspaper issues! Since this is a recycled greenhouse, Mr. Altman and I chose some of last year's copies of *The Commentator* to rip up. We used our summer tomato plant that would've died this winter for our green. First, you must dig a hole to tear up the ground. Since our compost is larger than an at-home one, we used shovels and hoes to tear up the soil. Once this hole has been dug, you plant your three layers (I call this the "7 layer dip of the world," I know, unfortunately, our compost isn't 7 layers.) We laid down our soil, our brown, and then our green in that order. After we laid down everything, I took about ten 96 oz containers to thoroughly water our compost. Water is necessary in compost because it promotes the life of microorganisms which break down the organic material in the compost.



## ***RESULTS!***

I checked on the compost a week later and was pleased with the progress so far. I took Pitchfork and tilled it up a bit to turn it. Turning your compost about every two weeks ensures quicker decomposition rates. Since this compost is just a week old, we turned it after a week to make sure everything was running accordingly. Another reason compost should be turned every two weeks is because that's when the compost has the warmest temperature, which promotes high bacterial activity. We established in the previous section that bacteria in compost are good for breaking down organic material.

