

WATER FILTRATION SYSTEM

Science project – Georgia Bourke & Breeanna Luc – 9E

WATER FILTRATION SYSTEM DESCRIPTION

The water filtration system we are creating is to help the water become cleaner and a better environment for all the animals and ecosystems that rely on the nearby water sources. Although it may not be the best water source for humans if they want to use it to rehydrate, but it should be able to used to go swimming etc. It will be a device that is able to in the water and not be too big that an animal or human may break it on accident.

We are aiming for it to be a working device made out of items like a big glass mason jar and all different layers with a wooden base so the cleaner water is visible.

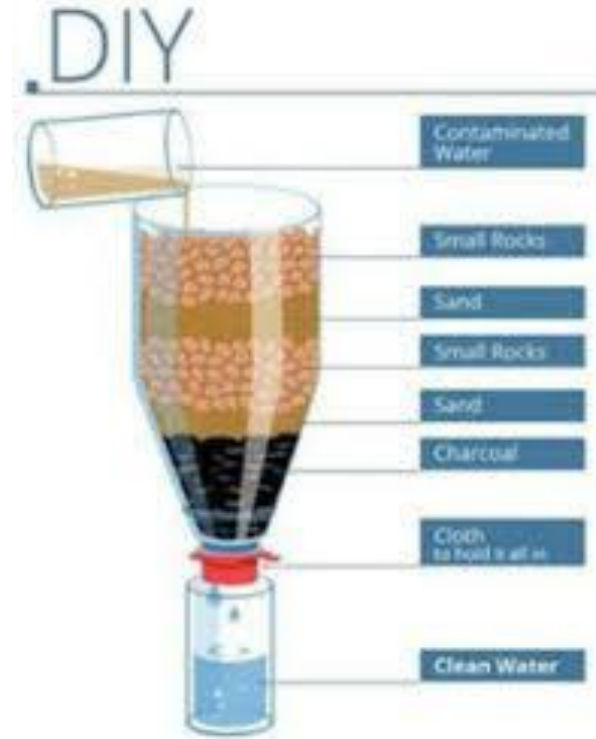
HOW IT WILL FUNCTION?

This water filtration system is aimed to function whilst in the water and is going to filter in through the top of the jar and pass through all the different layers and all the dirt and bad particles will be caught at the bottom of the jar in some foam wool and then the clean water is then filtered through wood and metal mesh then out through a metal tap.

It will filter through two or more sections that will collect the dirt, twigs, rocks and more to make the water cleaner, as well as to separate the dirt from water and create a better environment for the animals and organisms that live off the water. Then go into a bigger area as the clean water and filter through a fish tank filter to make sure it is as clean as possible.

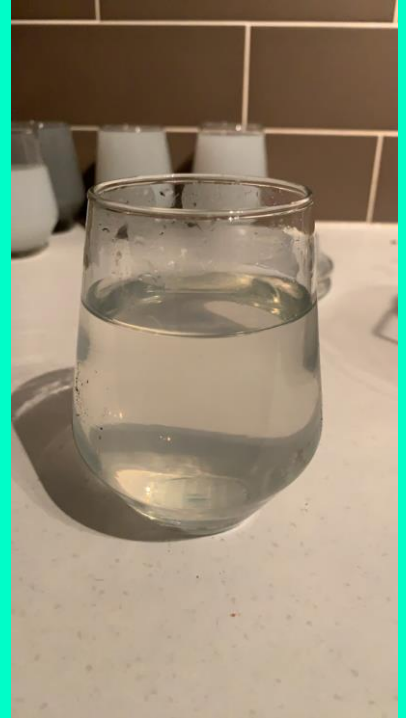
OVERALL GOALS

The goals of this creation is to create cleaner and more sustainable water for the ecosystems within it. As well as to catch all the dirt, twigs, sticks and rocks to hopefully make the water cleaner and get rid of some bacteria from the water. As well as to create a better environment for all living organisms that use it.



DID THE FINAL PRODUCT WORK WITH NORMAL WATER?

Our first attempt with already clean water was to clear out the charcoal they fell through to the bottom therefore that's why it is so dark and cloudy. Although our second attempt wasn't so successful as the silicone we used to hold the wood in place created a hole on the side and didn't dry properly so it made the water cloudy. But after a while of running hot water the silicone dissolved and created clear water.



DID THE FINAL PRODUCT WORK WITH DIRTY WATER?

Our first attempt with dirty water with twigs and clumps of dirt in it faced the same problem we had as the plain water but once we fixed it, the water came out perfectly clear with no dirt, rocks, twigs or leaves in it. Perfect for people to swim in and a great place for animals to drink from or live in.



WHAT COULD WE IMPROVE OF?

In the future we should try to finding a replacement or just not use the silicone so maybe the water is 100% clean next time. Which if in the end that comes to working will make a bigger, better, functioning system that will create a better environment for everyone.

