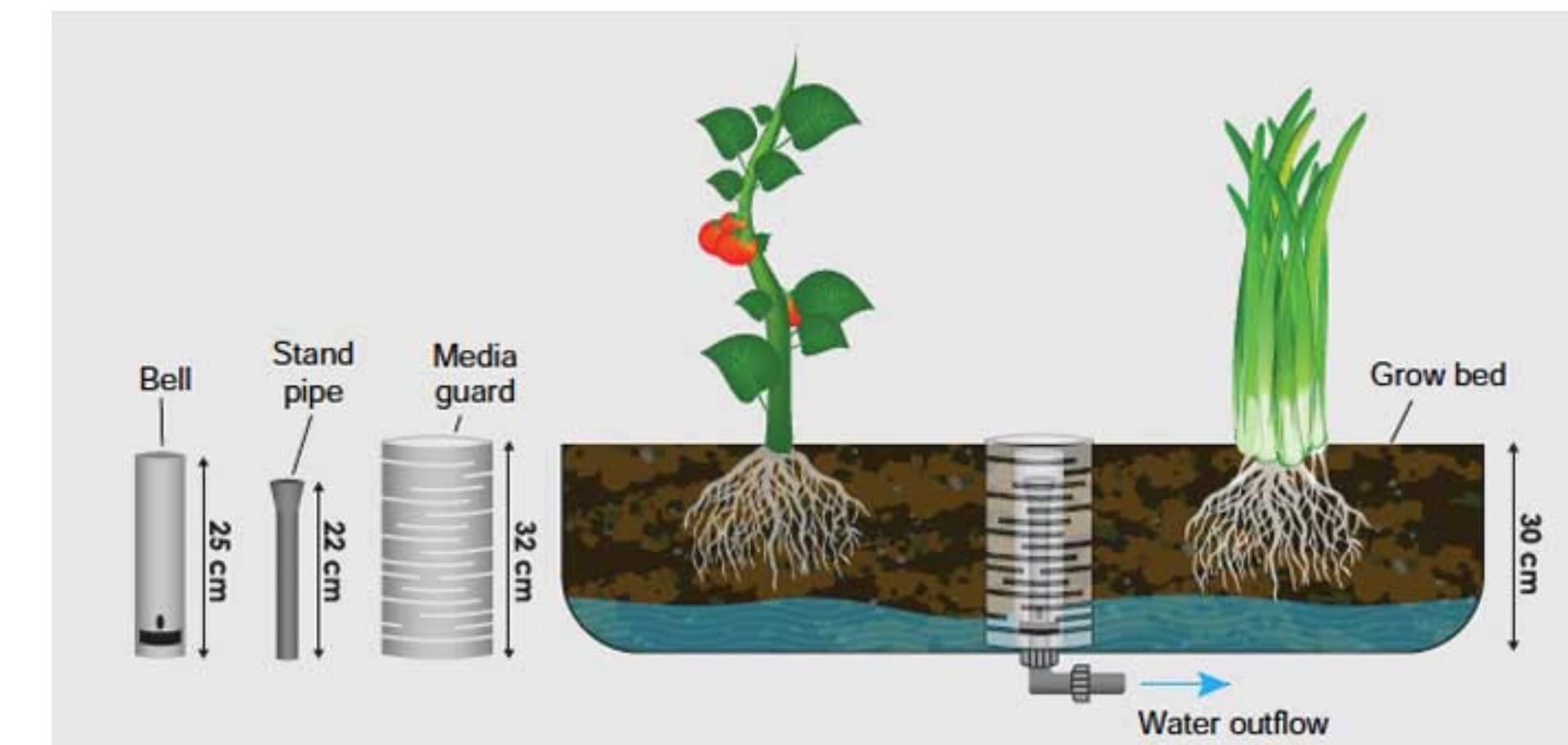
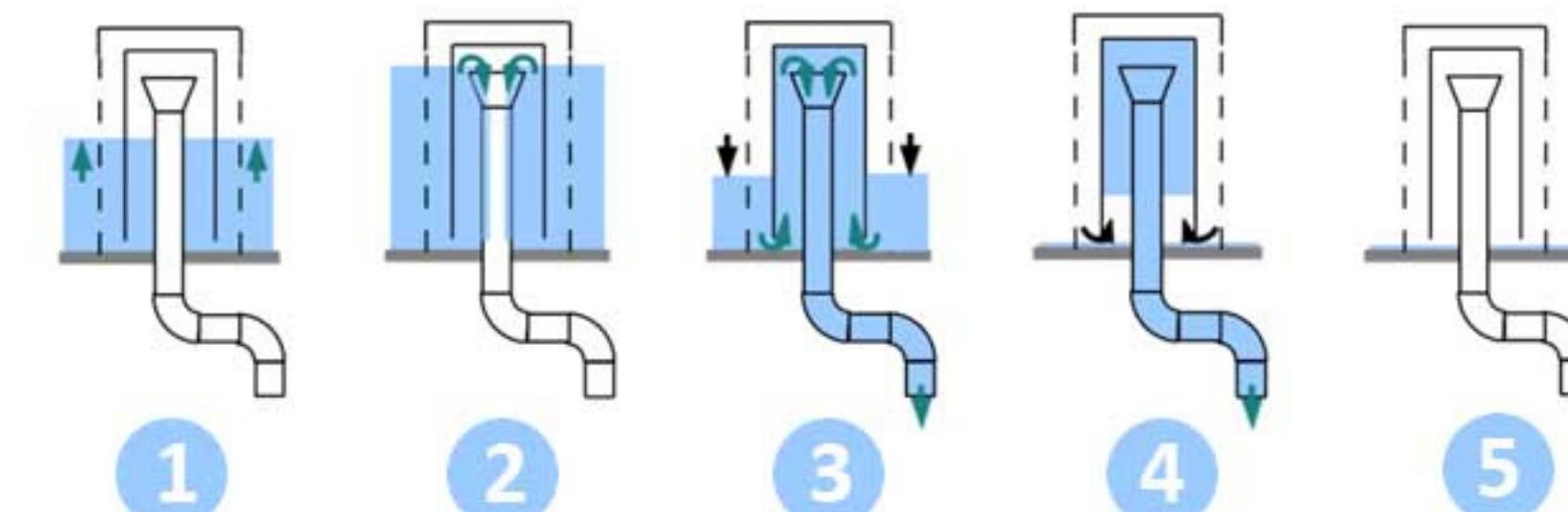
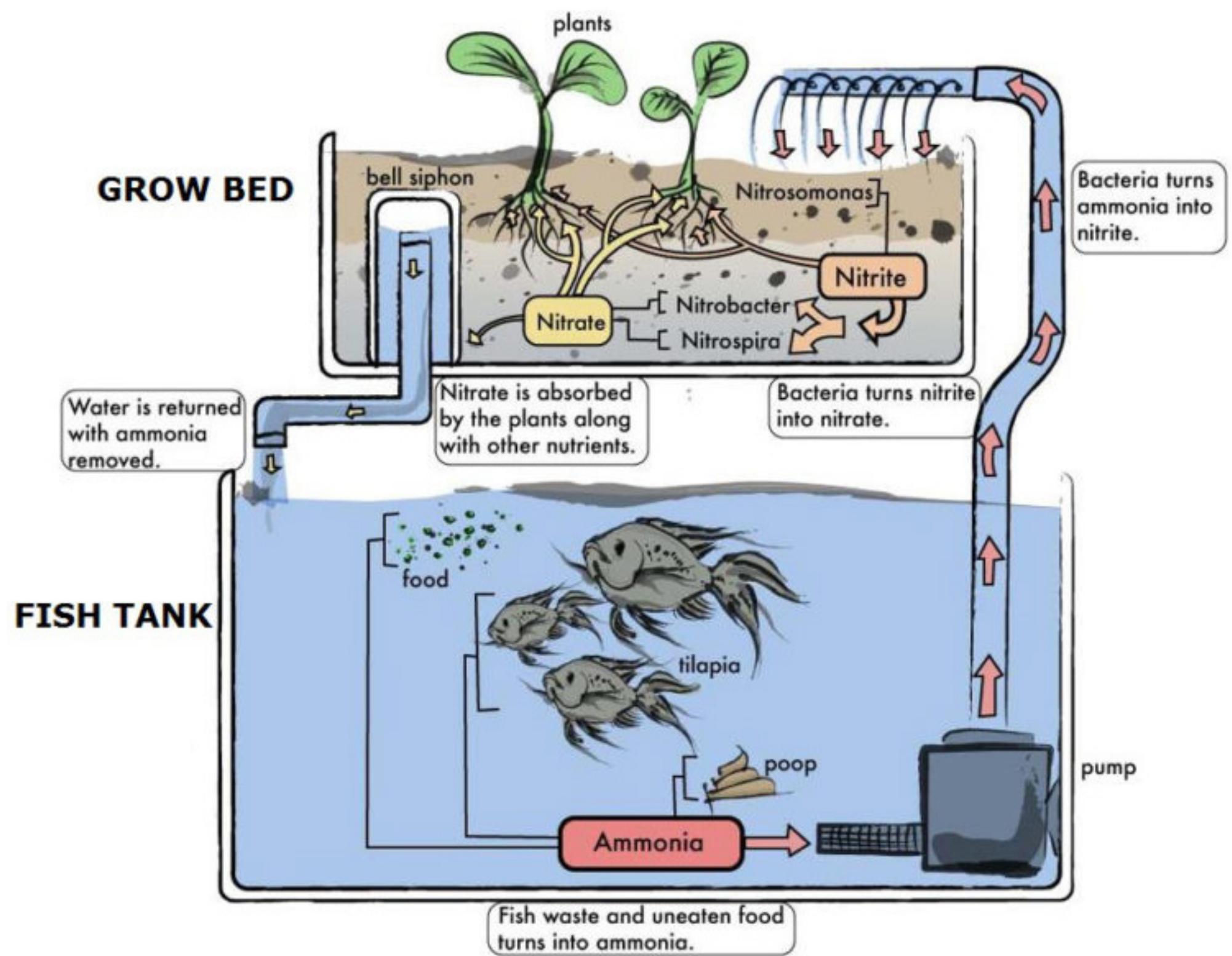


My Own Brief

A simple, minimalist indoor aquaponic system for home use that requires minimal background knowledge and set-up.

Aquaponic System



Inspiration

ferm
LIVING

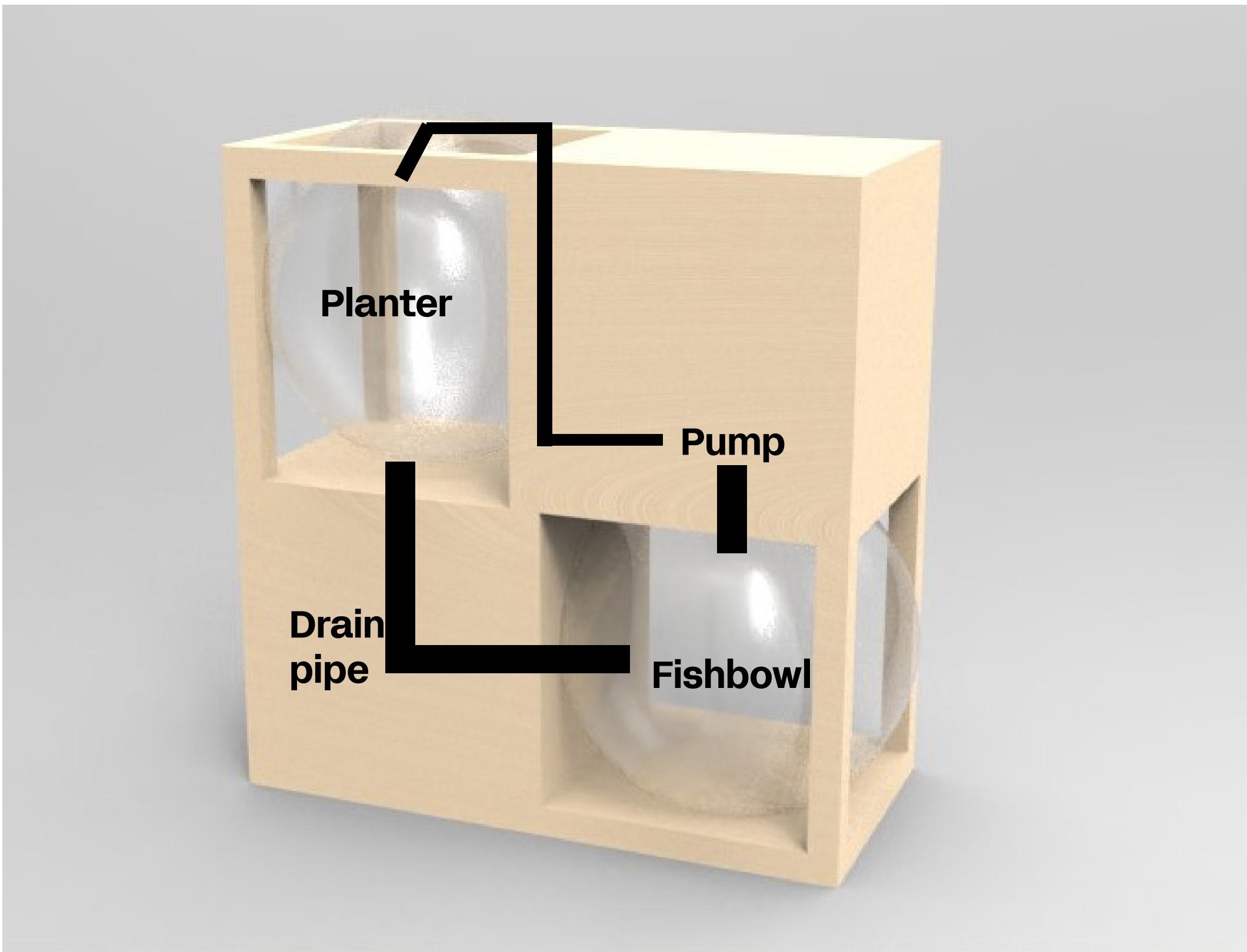
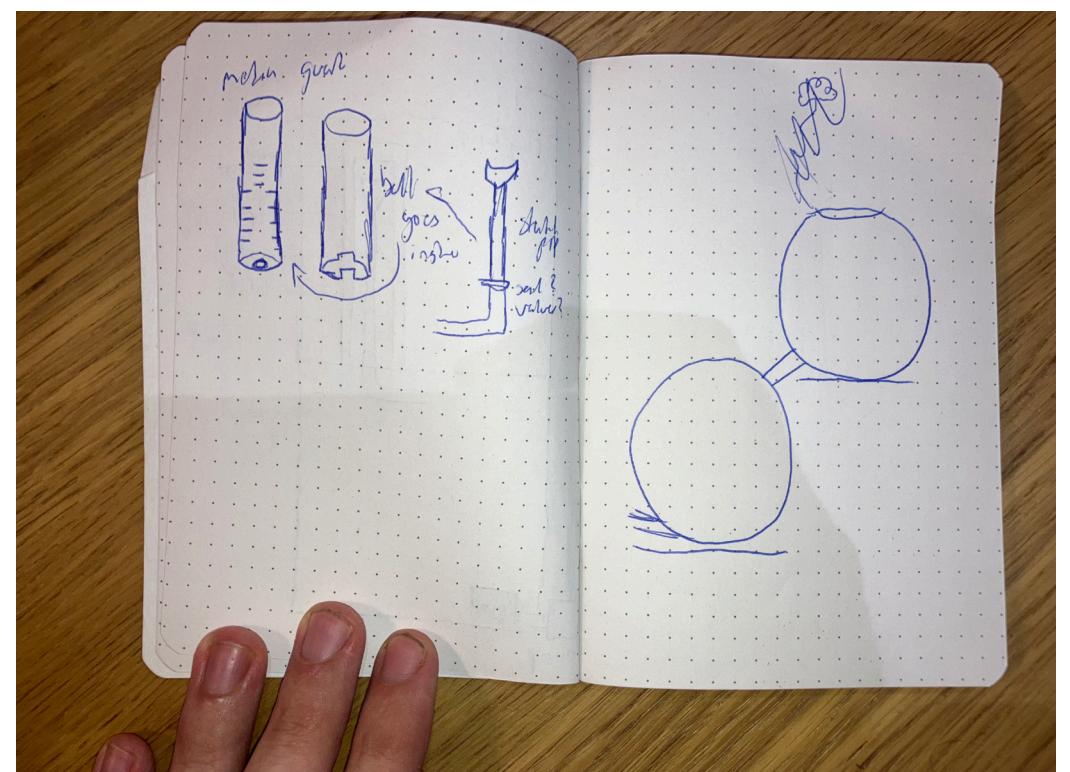
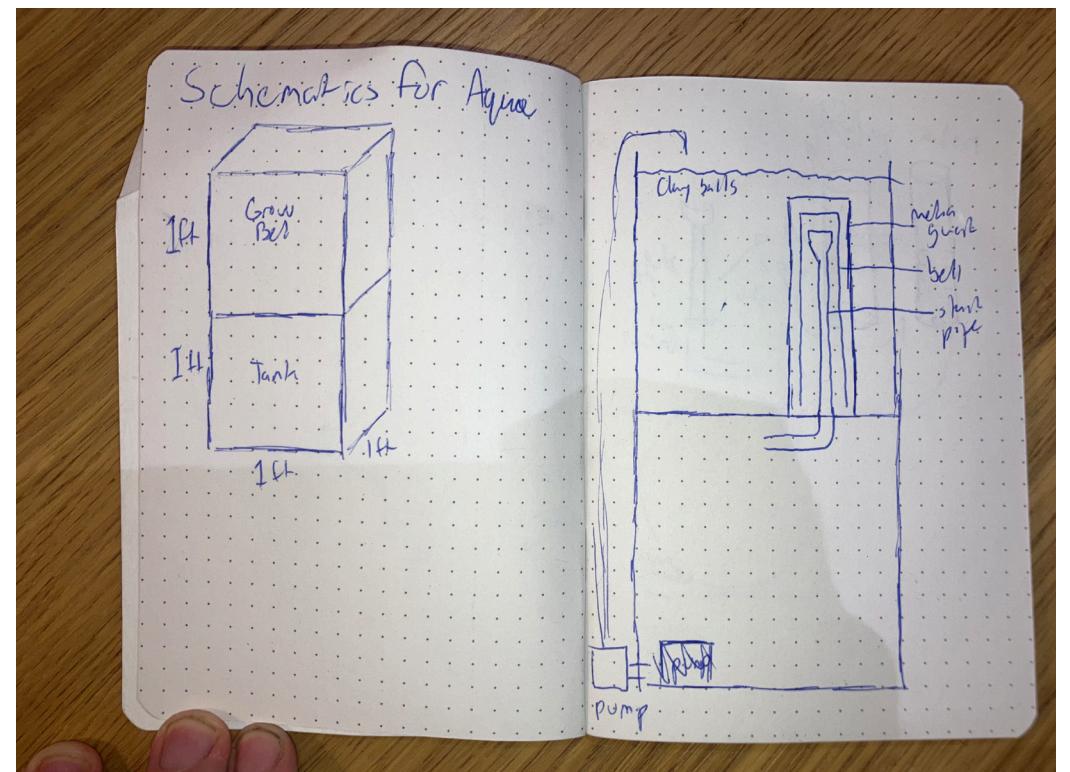


Roger Arquer Studio

ferm LIVING is a Danish product design firm that places a lot of emphasis on sustainability. In their own words, they create honest products and calm environments. Therefore, to create a product that fits into ferm LIVING's catalogue, I had to design a product that could be sustainably produced, and that provides a calming aura to those in its presence.

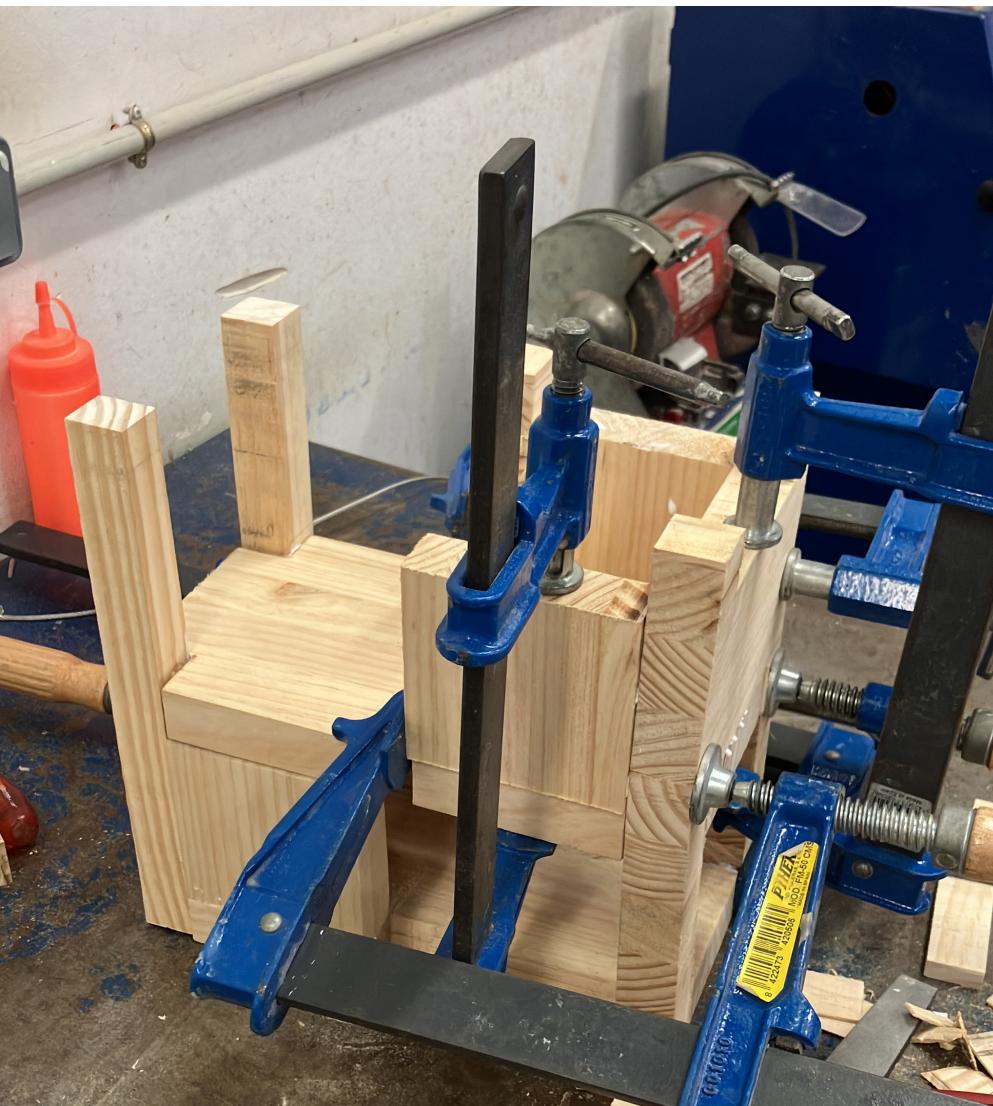
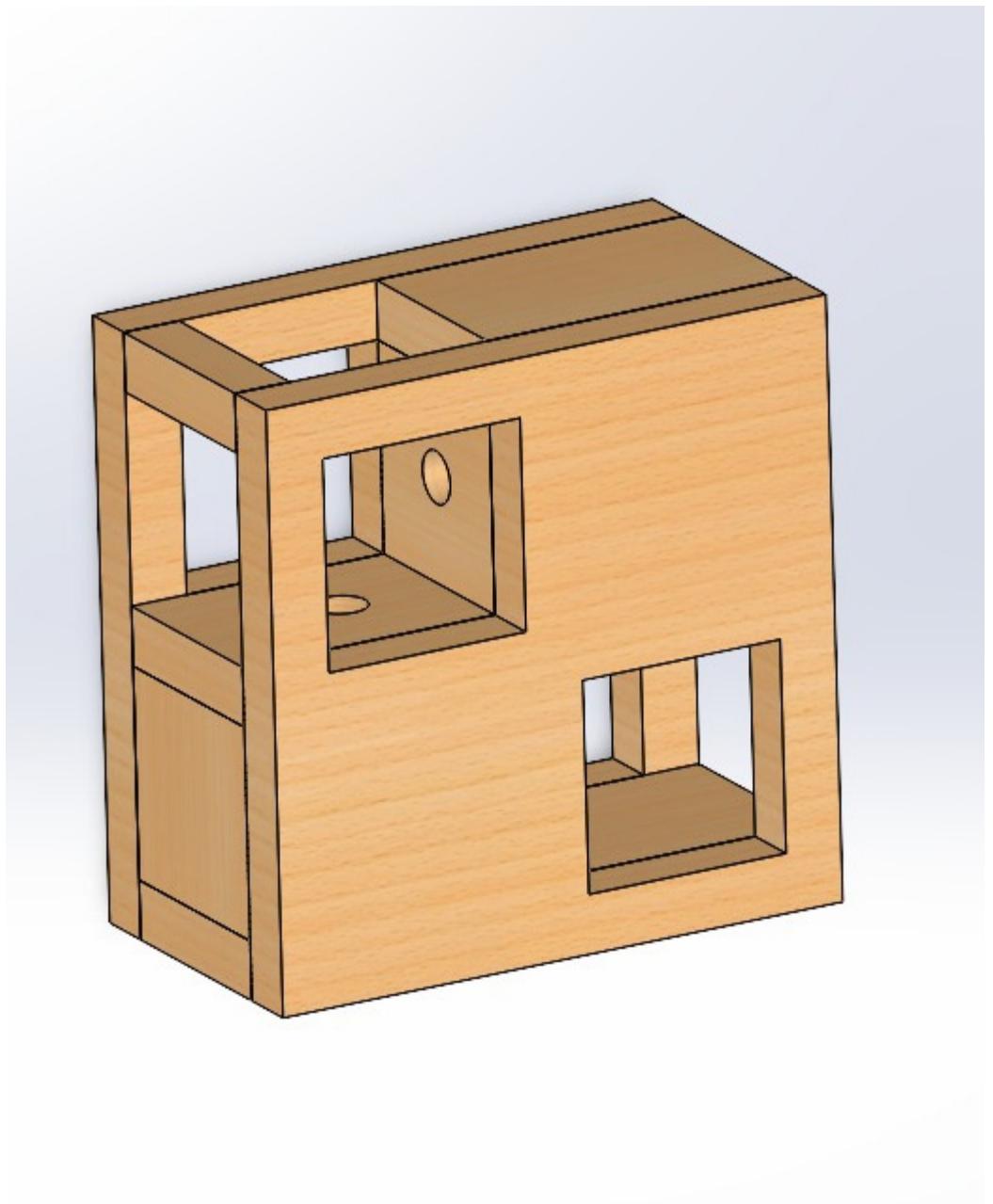
I also looked to Roger Arquer for inspiration, who had developed relevant design concepts to aquaponic systems.

Sketches & Models



I created some sketches of the inner workings of the aquaponic system, then 3D-modelled a design in Rhino that has the ability to hide the plumbing.

Prototype



I attempted to built the wooden part of the model out of 2.8cm thick pine wood. My initial plan was to CNC, but that did not fit my timeline, so I had to change the blueprint to avoid cutting holes out of the wood.

The wood used in the initial prototype was too thick, and the glass spheres did not fit in their respective places.

Final



This simple and elegant aquaponic system utilizes fish waste as fertilizer for plants, which in turn filter the water in the fishbowl, creating a mini-ecosystem in your living room. It is produced using sustainable materials: wood, glass and PVC plastic.