

Beyond Product: Regenerative Design Portfolio

Sydney Keller

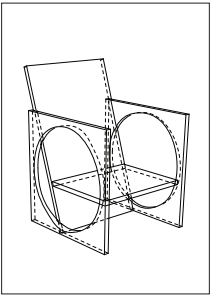
Project A: Doing Nothing

Using everyday materials in my life, create 36 objects that could visually represent a chair.

The final project is a collection of 9 seats that encourages everyone to see the hidden everyday forms that exist around us.



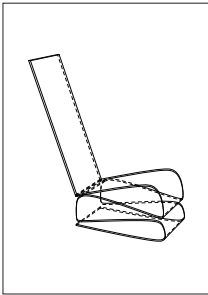
Cone chair
Verner Pato



Sedia Tonda Armchair
Edoardo Liett Studio



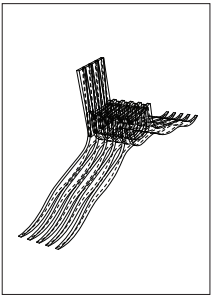
Qeeboo Ribbon Chair
Nika Zupanc



Vitra Gehry Wiggle Side Chair
Frank Gehry



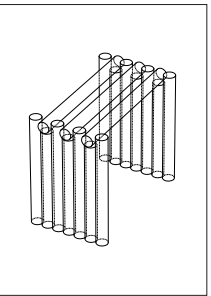
Ovalia Egg Chair
Henrik Thor-Larsen



Harp Chair
Jørgen Høvelskov



Louis Vuitton Portable Lounge
Marcel Wanders



Nelson Platform Bench
Herman Miller



K700 Stool Collection
Haworth Design Studio



Hay Wire



Chill Since



Rocking Fork



Teratoma



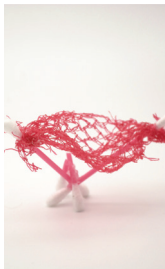
Coffee Chats



Petal



Pick Up Sticks



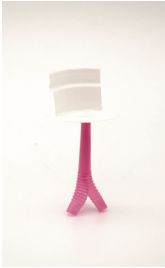
Naval



Fusilli Sit Down



Barbra



Snippets



Peacock



Barnyard



Bulb



Princess Protection



Bloom



TPU



Butt to Butt



Truffula Tree



Peared Down



Pin Cushion



No.1 Flosser



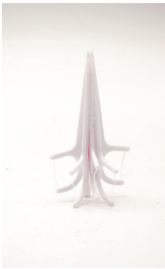
Nuts and Bolts



Baskinette



Tucked



Apollo



Chill Pill



Posted Up



Industrial



Wired



Bubble Bath



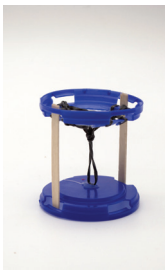
Thing 1



Thing 2



Sit Still, Look Pretty



Trampoline



Clipped

Project B: Regenerative Design – What is a Seat?

*Design a chair that challenges existing design practices and methods of production.
How can we re-examine what we consider as materials and what is waste?*

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At the time of this project, I was concurrently producing yarn scraps through my thesis work and wanted to repurpose the material. I also reached out to local textile shops and was able to collect a significant amount of fabric waste from Gather Here in Cambridge, MA.

Since the waste I had access to was predominantly soft and non-structural, I began thinking about how these materials might serve a different kind of purpose — not as structural components, but as sensory experiences. This led me to design an ‘object for resting’ intended for a pediatric hospital waiting room.

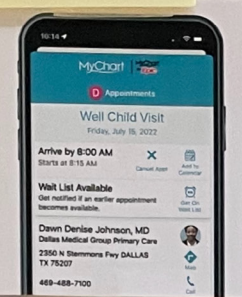
Growing up in Boston, I was fortunate to receive exemplary care at Boston Children’s Hospital. I wanted to draw from that experience — and from the emotional landscape of waiting rooms — to create something comforting, tactile, and distracting for children and their families. The softness of the materials lent themselves to a form that was interactive and playful, inviting rest and sensory engagement without relying on traditional upholstery or rigid structures.







She doesn't mind going, but hopes it'll be quick



Having midday snack strange



She's a little nervous



Emily's mom picks her up and they take a seat in the waiting room

Emily feels soothed by the bright colors



A TV plays one of Emily's favorite movies

She still fidgets, there's nothing to do but watch TV

She starts getting bored



The anticipation and unsettling noise added on to the boredom starts to make her worried



She now feels more nervous than when she left school

Notes from Emily's experience:  
- The bright colors of the office were welcoming and non-aggressive, helping Emily to feel calm  
- The TV provided a distraction, helping Emily not to linger too long on thoughts of her coming appointment  
↳ However, once that ended, there was nothing else to take her mind off the coming appointment  
↳ There should have been more distractions

Persona 1: Emily  
7 years old  
Boston, MA  
Health Condition: Asthma

Emily has been wheezing a lot so her mom makes an appointment w/ her pediatrician

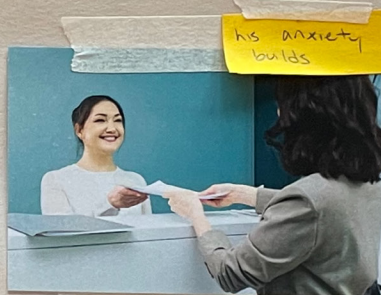
Emily gets picked up early from school to go to the doctor's



Persona 2: Michael  
14 years old  
Lexington, MA  
Health Condition: Anxiety



He doesn't want to go but his parents are going



His anxiety builds

He feels like the room has sucked away his energy

Environment feels cold and unwelcoming, making the wait feel even longer



There is no TV, no magazines, no background music

The chairs are stiff and packed together, offering no privacy

The room is dimly lit, with harsh fluorescent lights and dull tan walls

He is too anxious to even look at his phone for some digital stress release



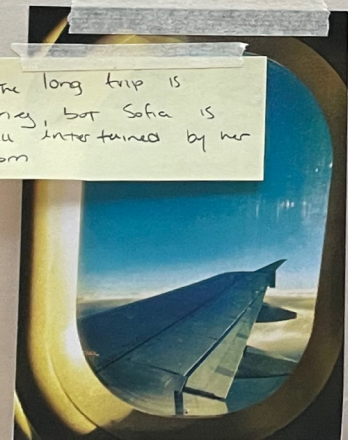
With nothing to do, Michael sits and observes other patients, receptionists, and nurses, waiting

Michael feels like he's being lead into some cold never-ending space

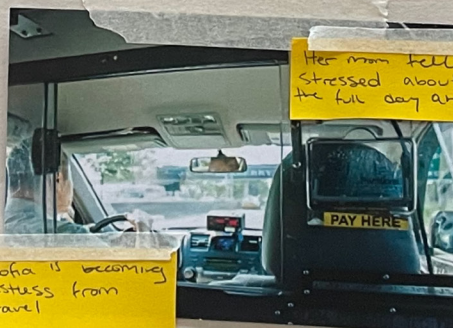


Michael's name is called and he walks into the entrance to the exam rooms

Notes from Michael's experience:  
- The waiting room fed deeply into Michael's anxieties because it was so institutionalized and sterile  
↳ a more vibrant and well-lit room could help  
↳ possibly incorporating more natural light and engaging features  
- The layout of the waiting room provided little privacy to Michael. He could see everyone and they could see him  
↳ providing smaller, more intimate environments within the larger room can make Michael feel more at home



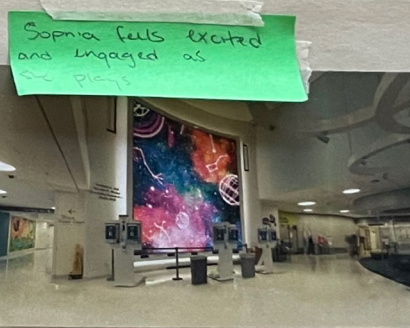
The long trip is tiring, but Sofia is well entertained by her mom



Her mom tells stressed about the full day ahead

Sofia is becoming restless from travel

After landing, they take a taxi straight to the hospital



Sophia feels excited and engaged as she plays

Sophia doesn't quite register this room as belonging to a hospital

check in and enter waiting room



She feels invited in to the space, delighted to enter it

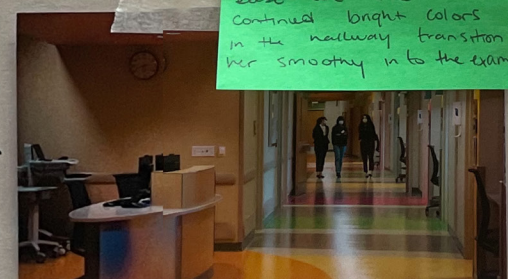
She feels relaxed taking her mind off the appointment

Instead of just sitting, Sofia interacts with the space while she plays her mom fills it paperwork, free of having to entertain her daughter

her imagination runs wild as she interacts with the space



Soft lighting and natural materials make the room feel less clinical



Sophia feels at ease and the continued bright colors in the hallway transition her smoothly into the exam

Sofia's name is called and she walks into the hallway

Notes from Sophia's experience:  
Sophia was able to remain relaxed and unbothered about her upcoming appointment through the designed implementation of multiple interventions on the classic waiting room:  
- Distraction techniques  
- Positive environment design  
- Engaging and tactile object to promote interaction

User Profile Board



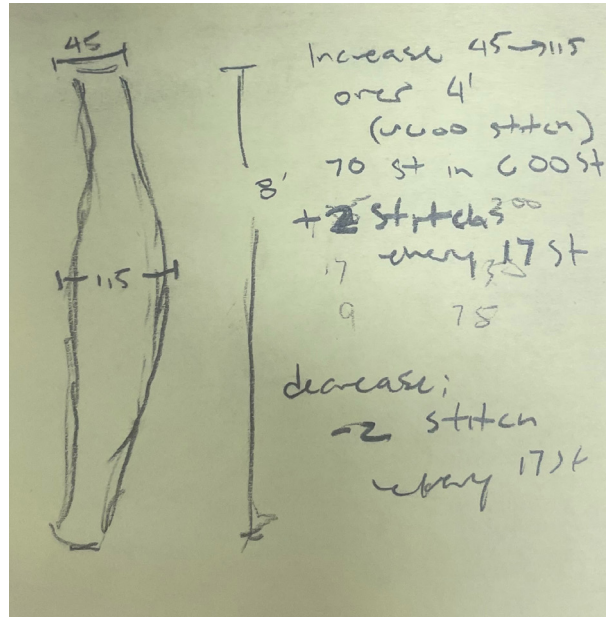
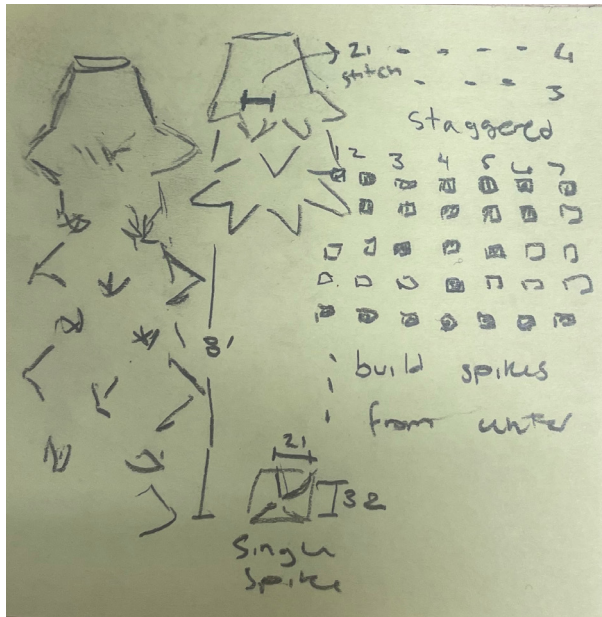
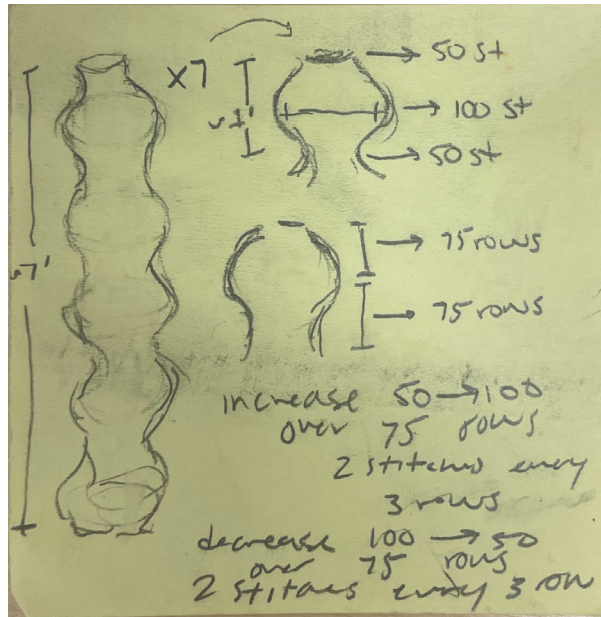
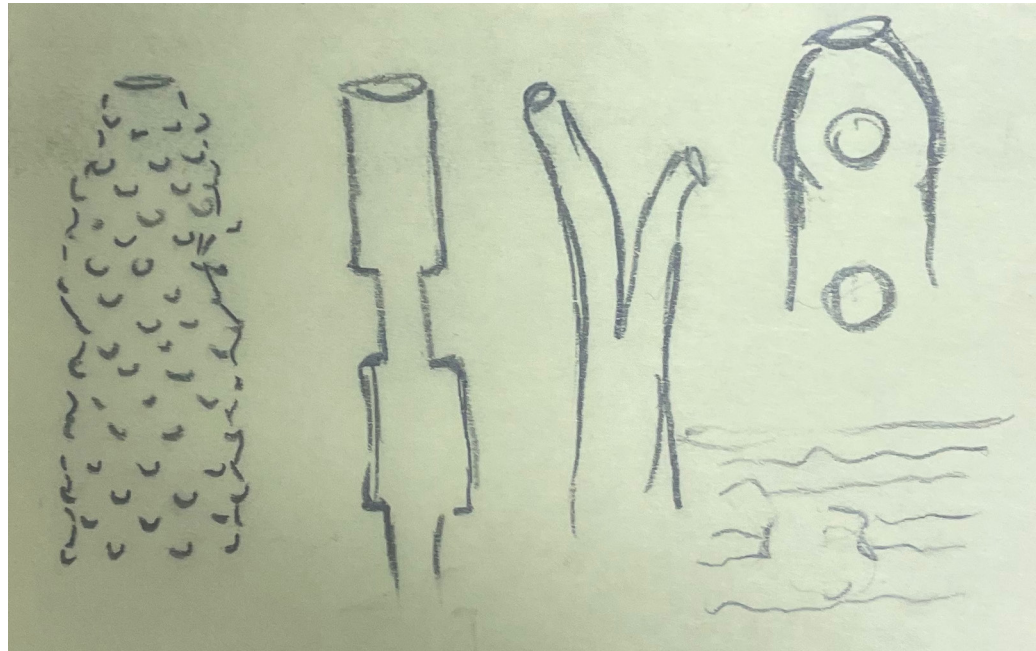


Inspo Board

## Bodystorming for Knot Chair







## Textile Waste

### Example Yarn Scraps

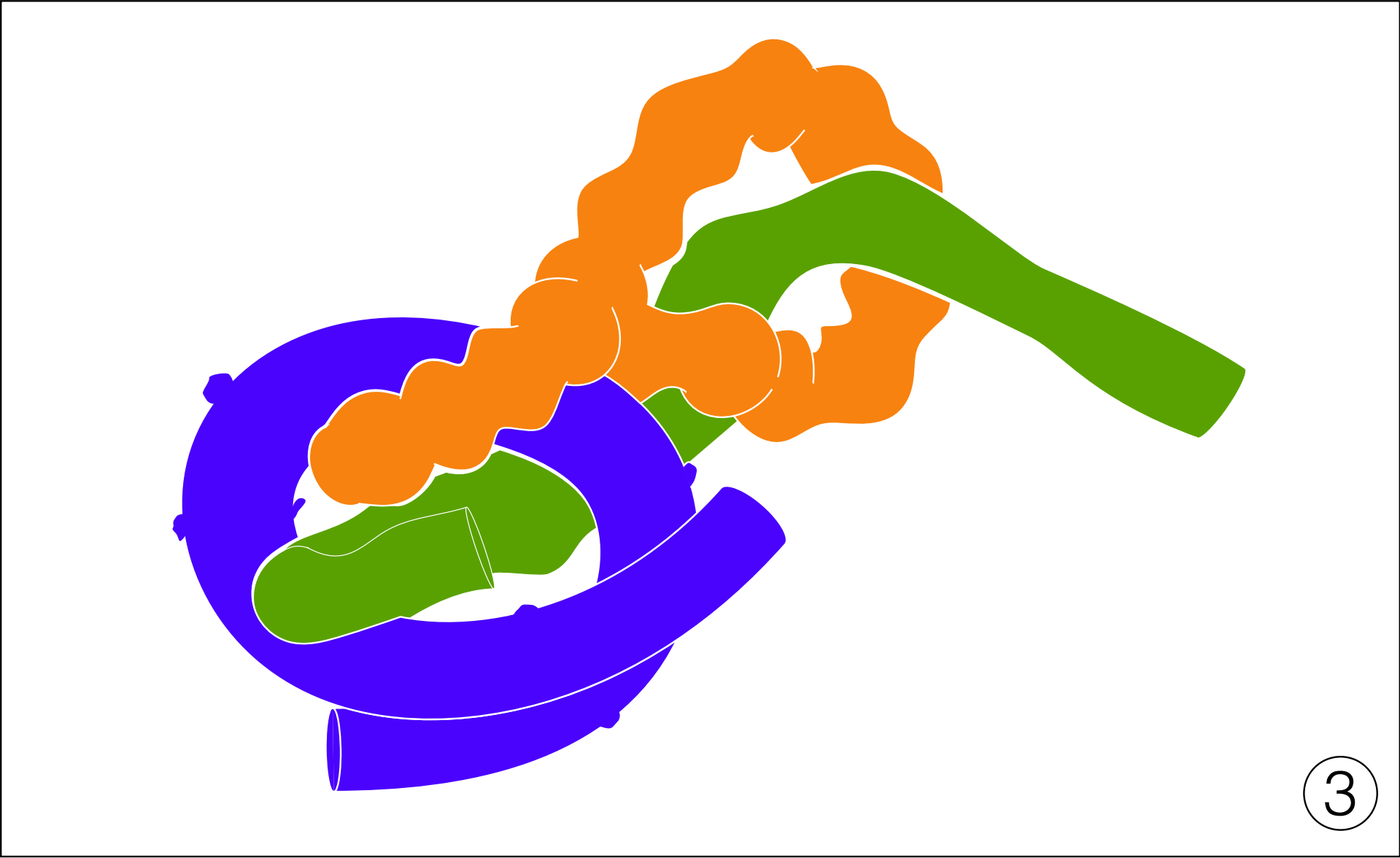
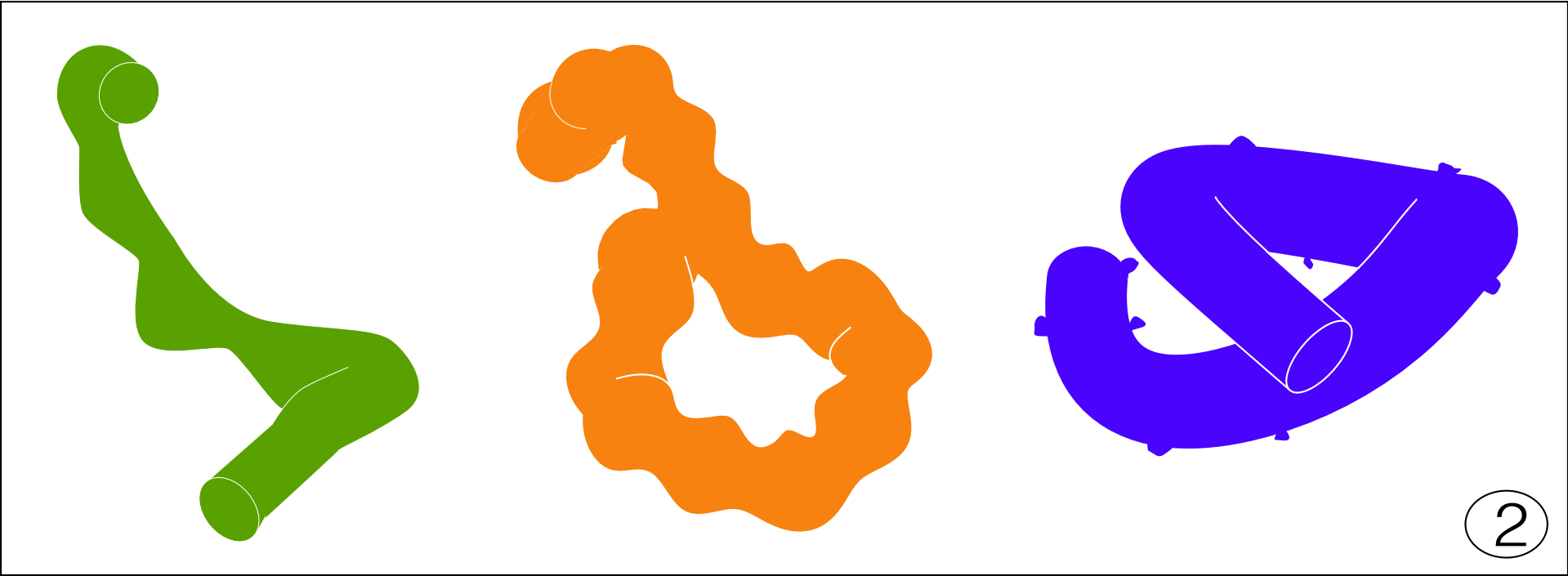
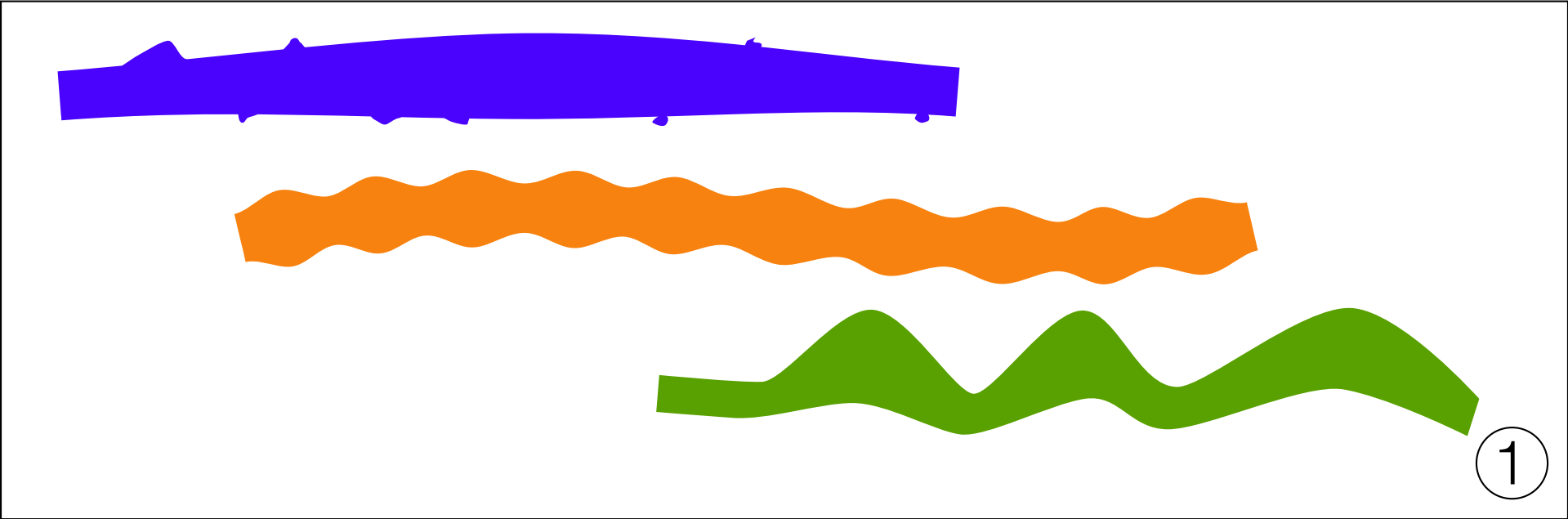


### Example Fabric Scraps





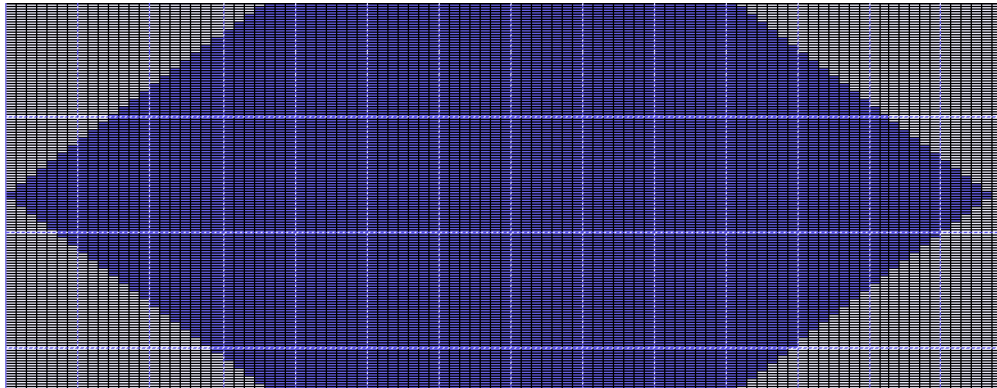
Knot Chai Diagram





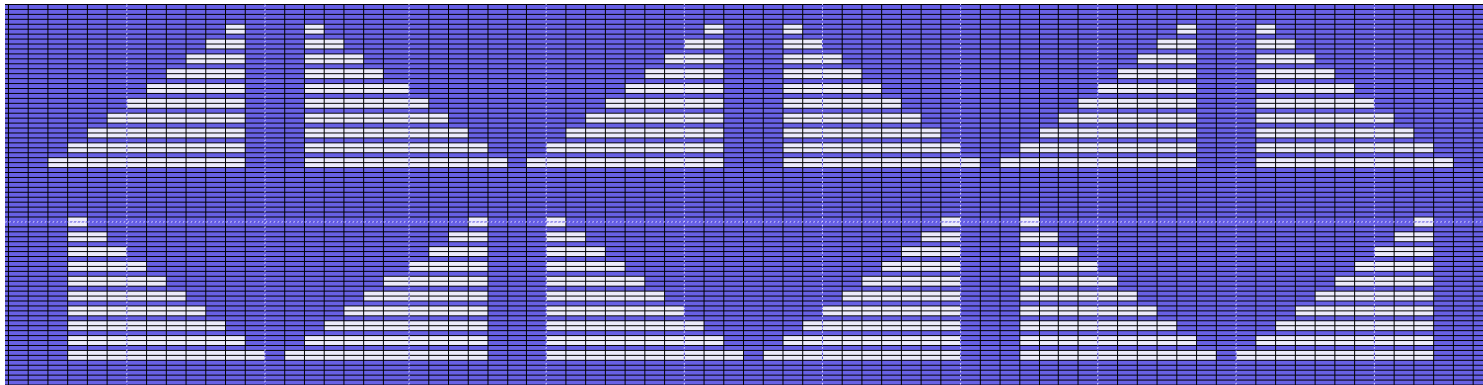
# Excel Patterns for Tubes

Tube 1

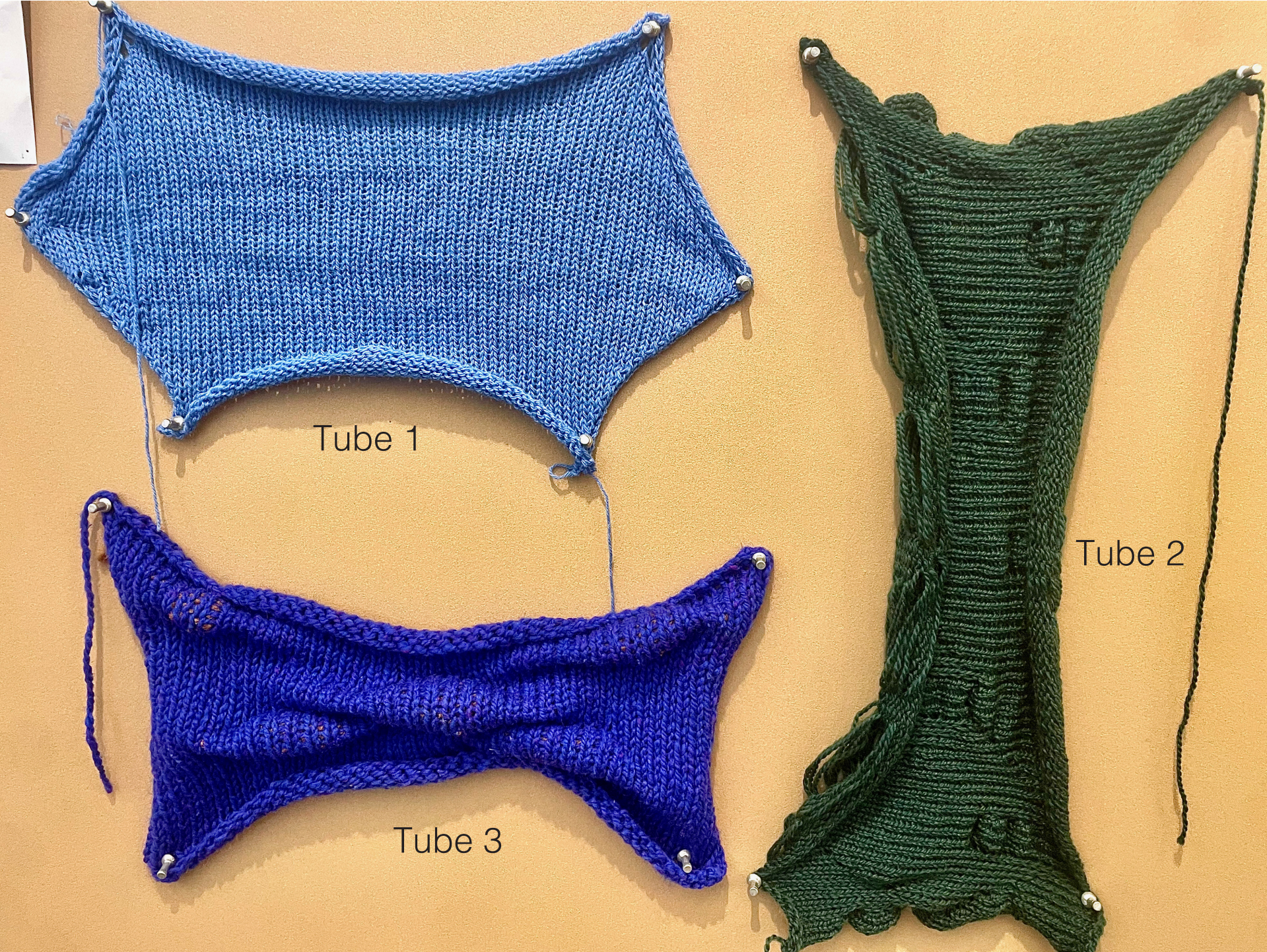
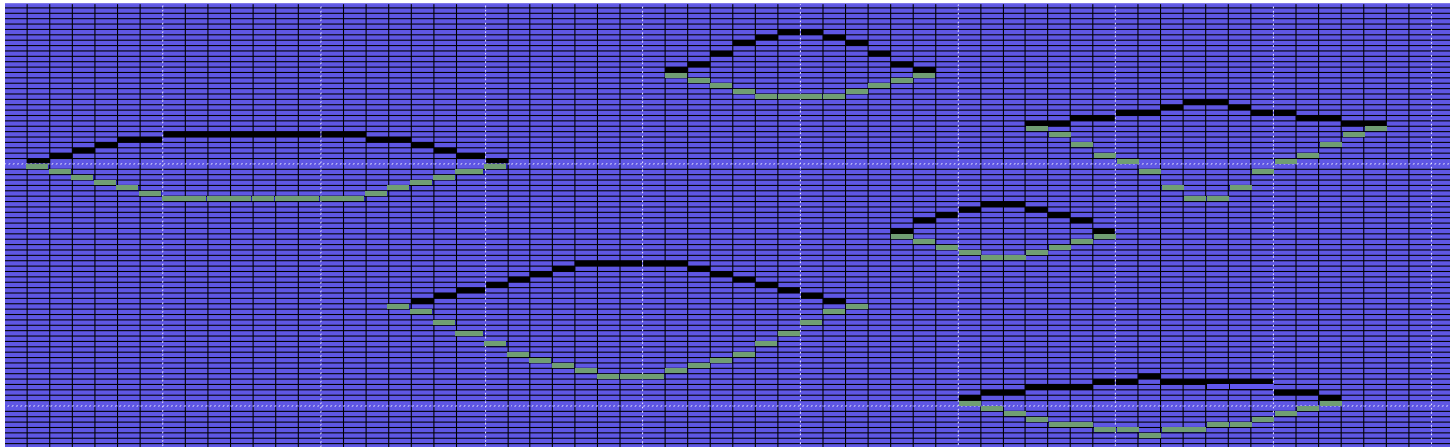


- Knit
- Do not knit
- Purl stitch picked up
- Stitch purl is put over

Tube 2

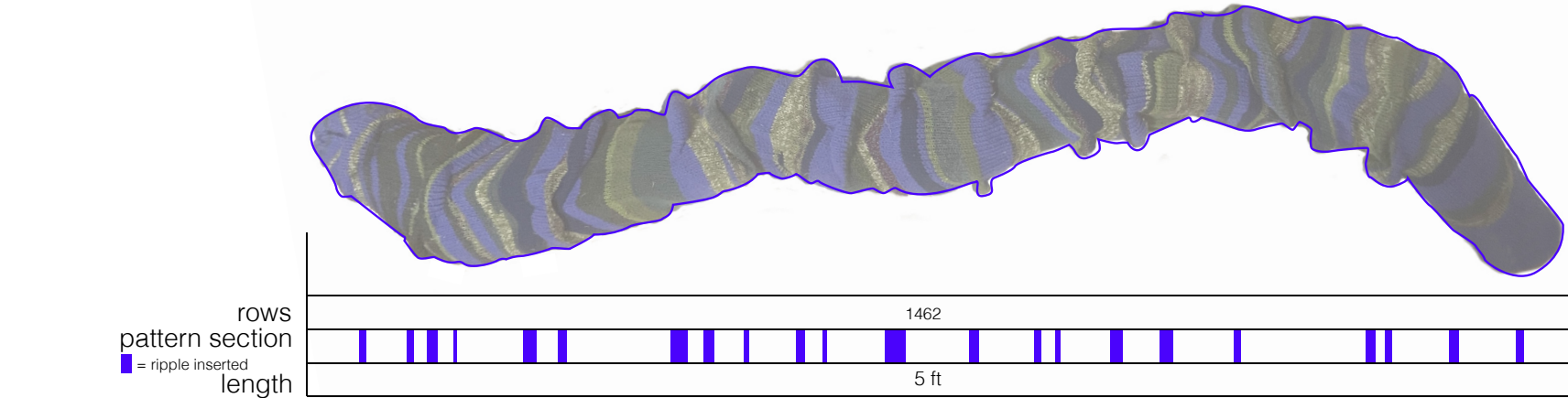
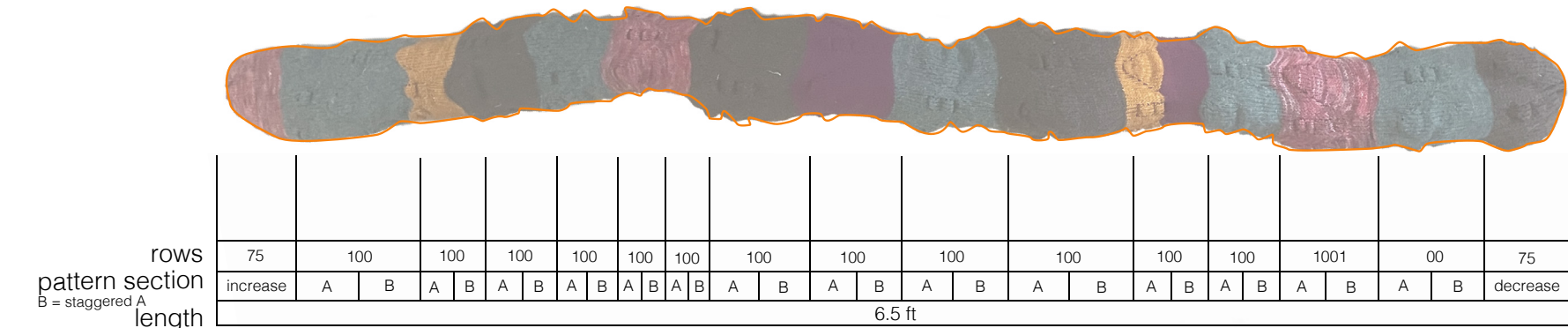
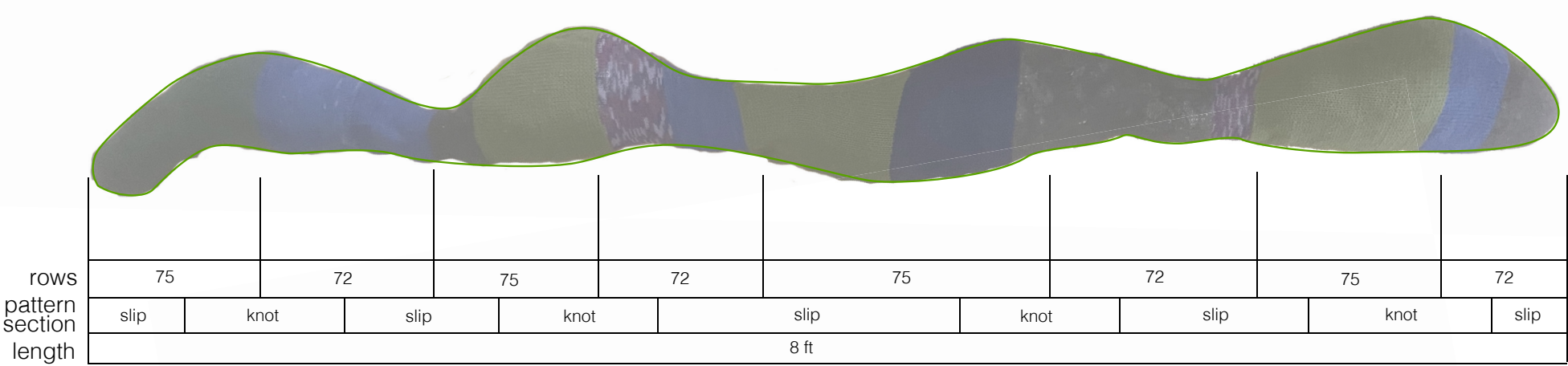


Tube 3

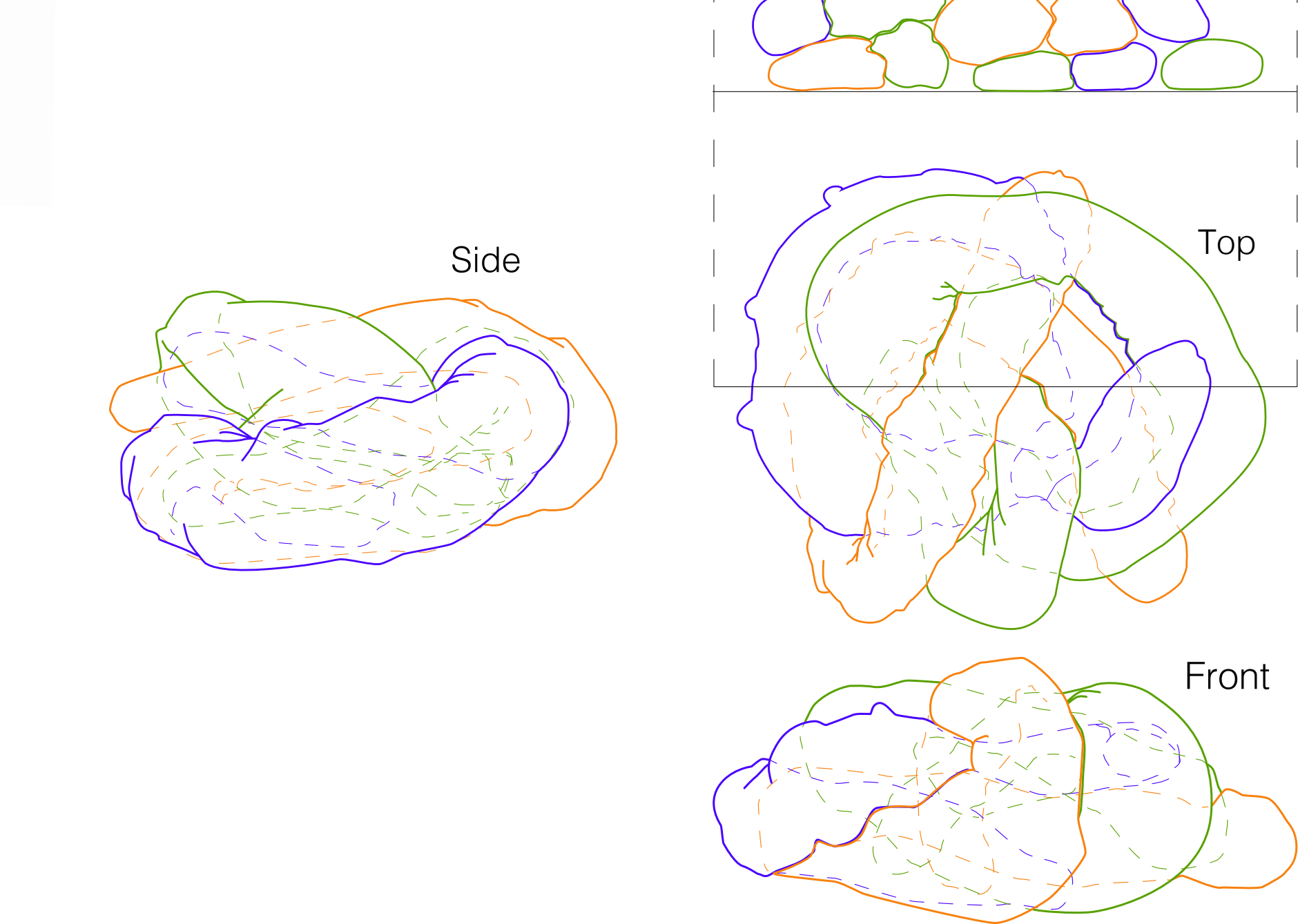




Tube Diagrams



Orthographic Views





Mockup of Pediatric Hospital Waiting Room  
with Knot Chair

