

STEAM PROJECT BY ARTIST JESSICA LING FINDLEY

COVID INVENTIONS: MAKE SILLY SERIOUS SCULPTURES

Design a machine or tool that will help you do normal activities things you want or need to do while obeying the 6ft separation distance of the Corona Virus. This might end up looking like a silly invention or not quite be useful practically but the process will illustrate a read design thinking process used to solve a problems.

ESTIMATED TIME: 1-3 HOURS



Materials Needed

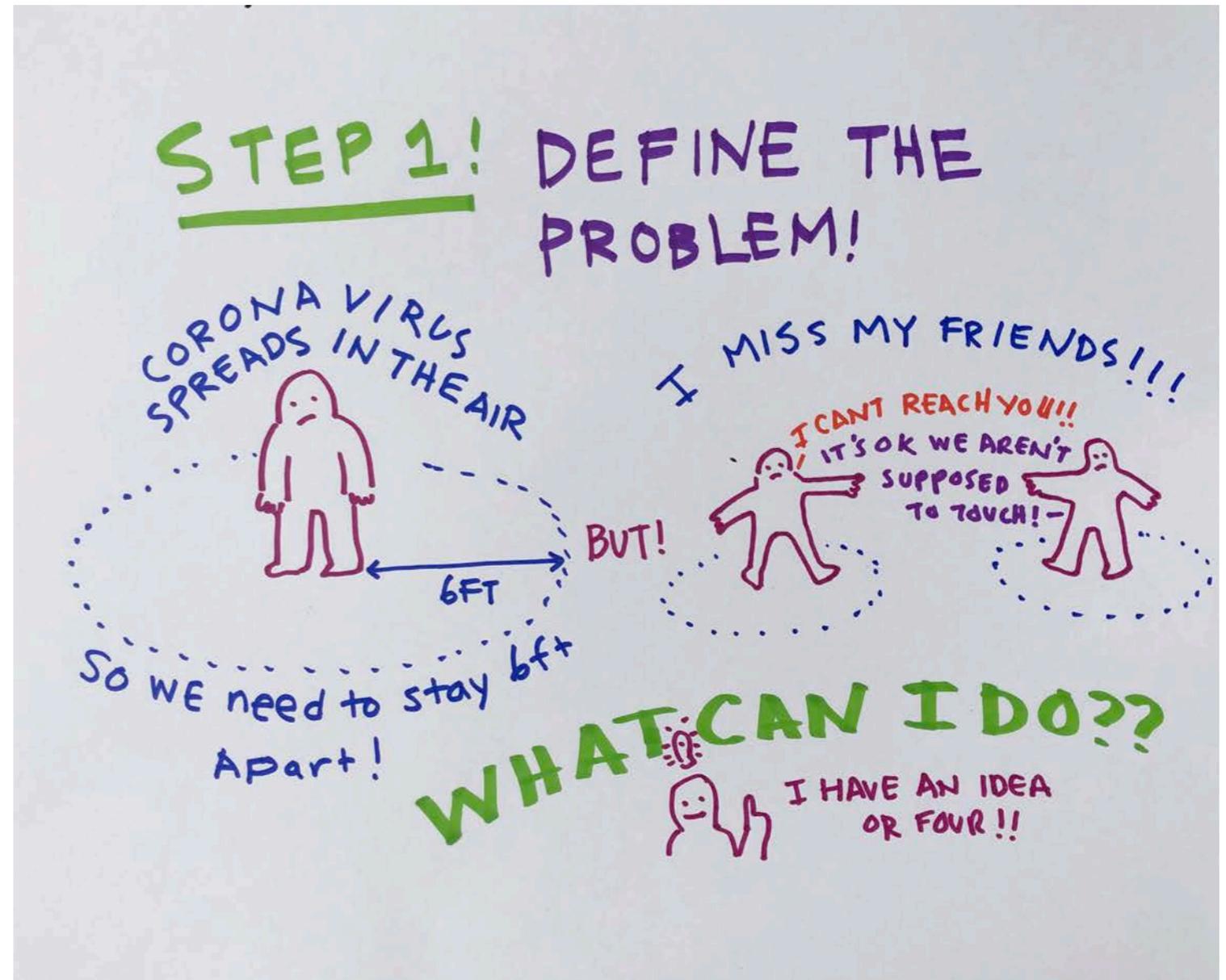
- **Designing:** Pencil and paper for drafting ideas and taking notes
- **Building:** Any materials at home that can be used or temporarily repurposed in the prototype making process. What you will need will be more clear after you sketch your plan.



STEP 1

DEFINE THE PROBLEM

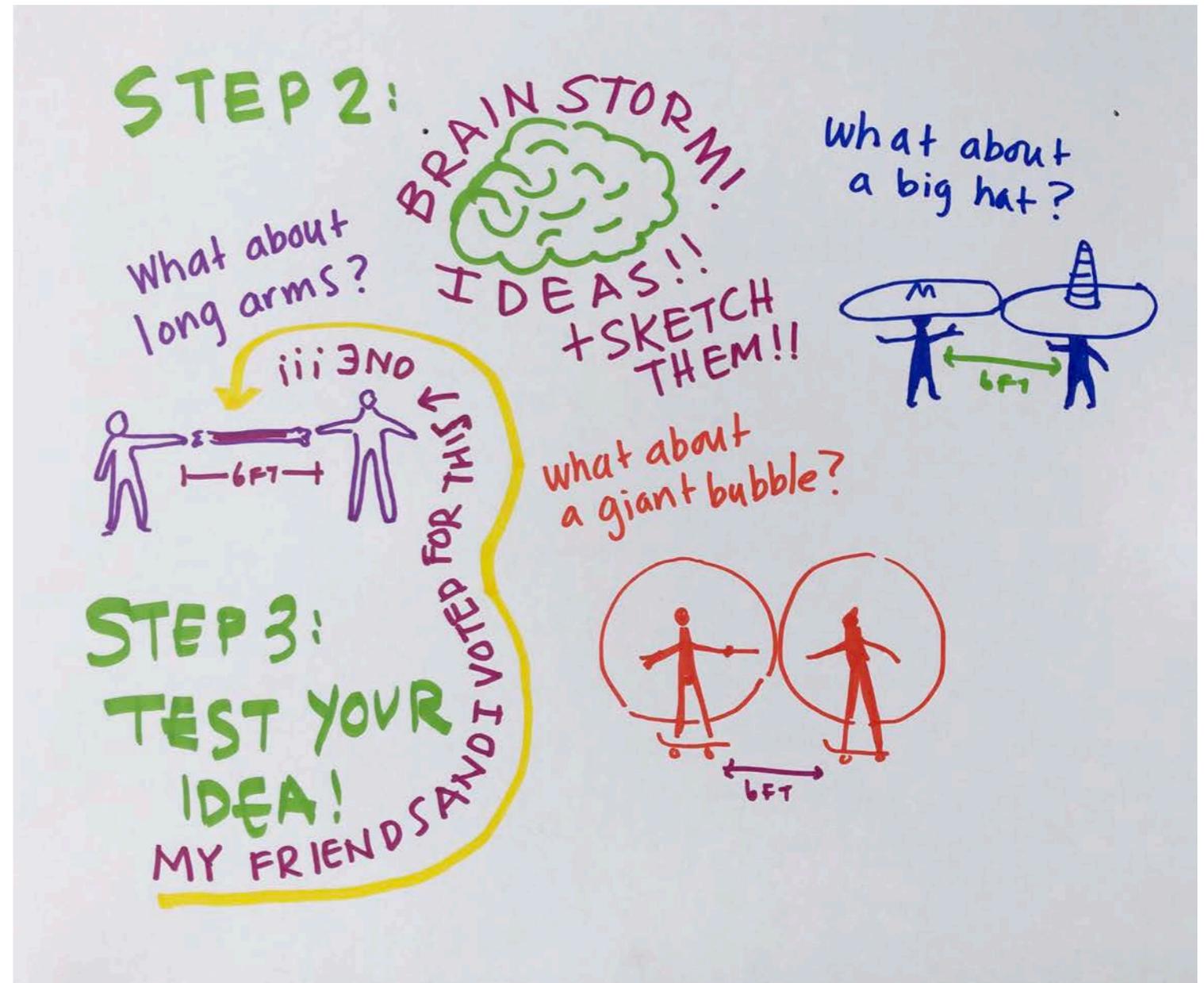
- Research what activity would you like to do that you need to stay 6 ft apart from someone to stay safe during the Corona Virus shelter in place. What methods could help you? Write some ideas and take a survey of your friends and family, what do they wish they could do?
- My example “I want to give my friend a high 5 but I can’t because I need to stay 6 ft away to be safe.”



STEP 2

BRAINSTORM AND SKETCH

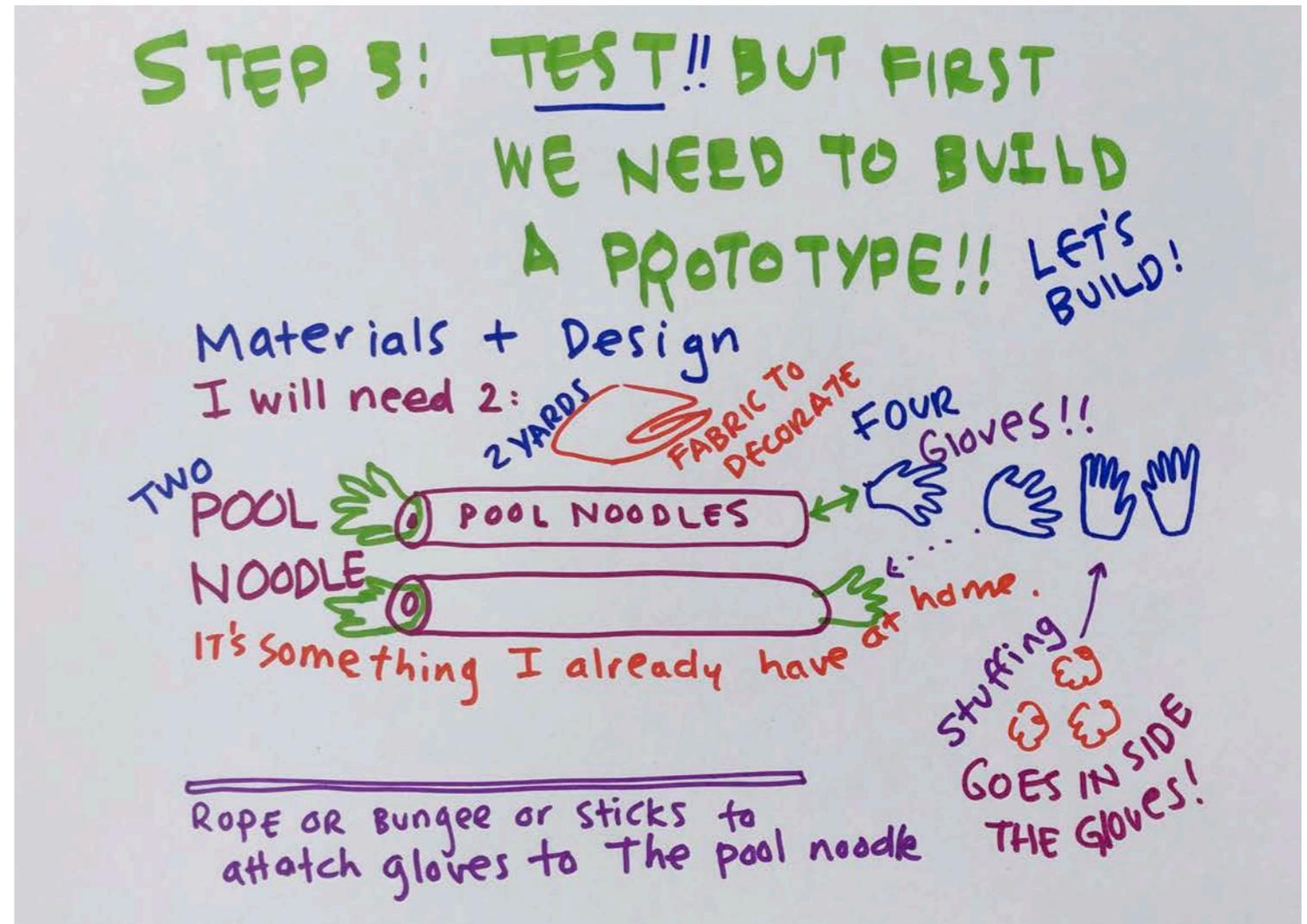
- Do a sketch of your idea that includes measurements, materials (the challenge requires you use materials you already have at home) and notes on construction and use.



STEP 3

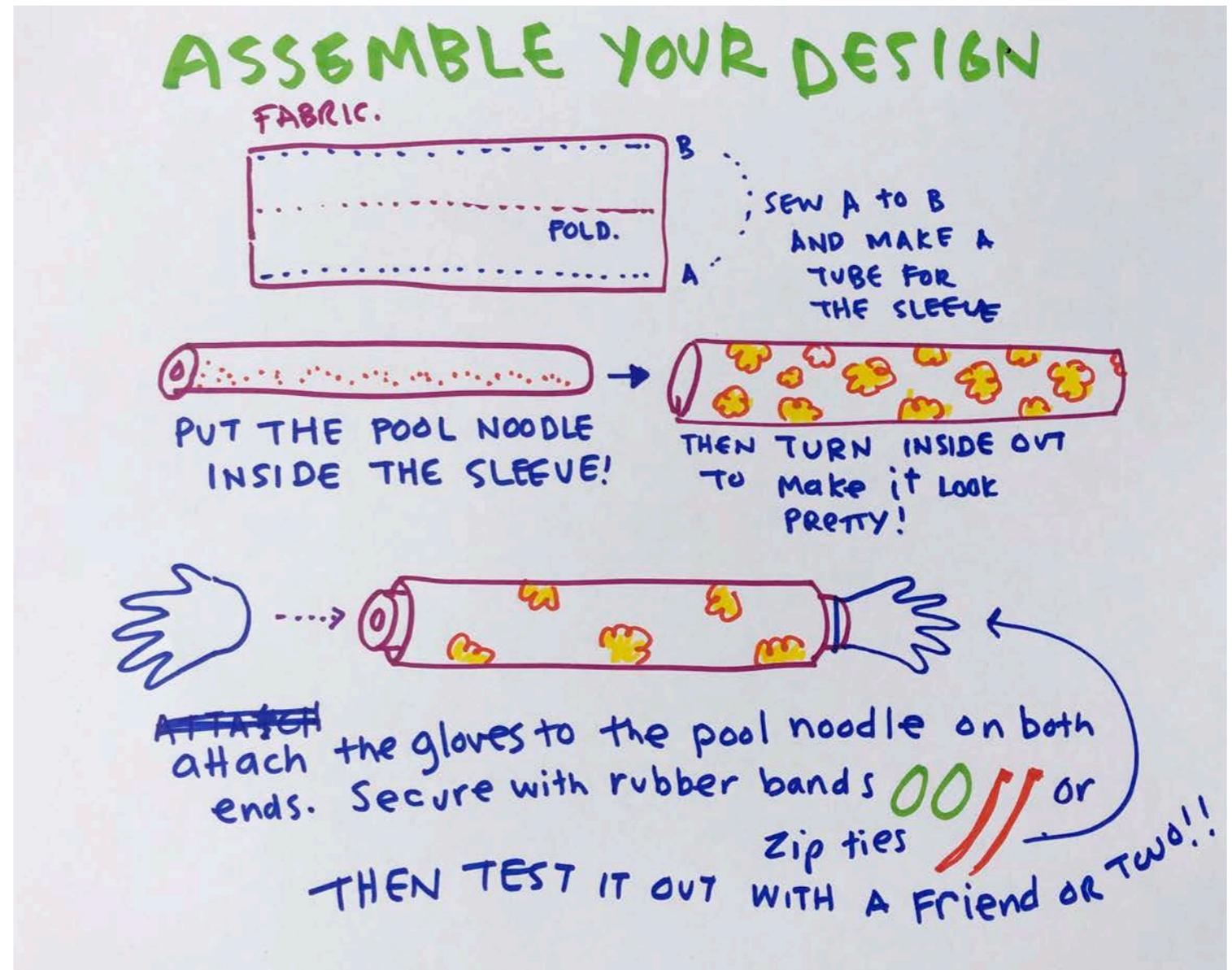
BUILD A PROTOTYPE

- Test your idea by building a prototype or smaller scale model from cardboard and paper. Challenge yourself by using materials you have at home your family doesn't need. Be sure write down your process and any problems.



ASSEMBLE YOUR DESIGN

- Refine your sketches and make measurements for materials. Make notes on how you will build the sculpture. You may find that the sculpture changes as you build.



STEP 4

REVIEW

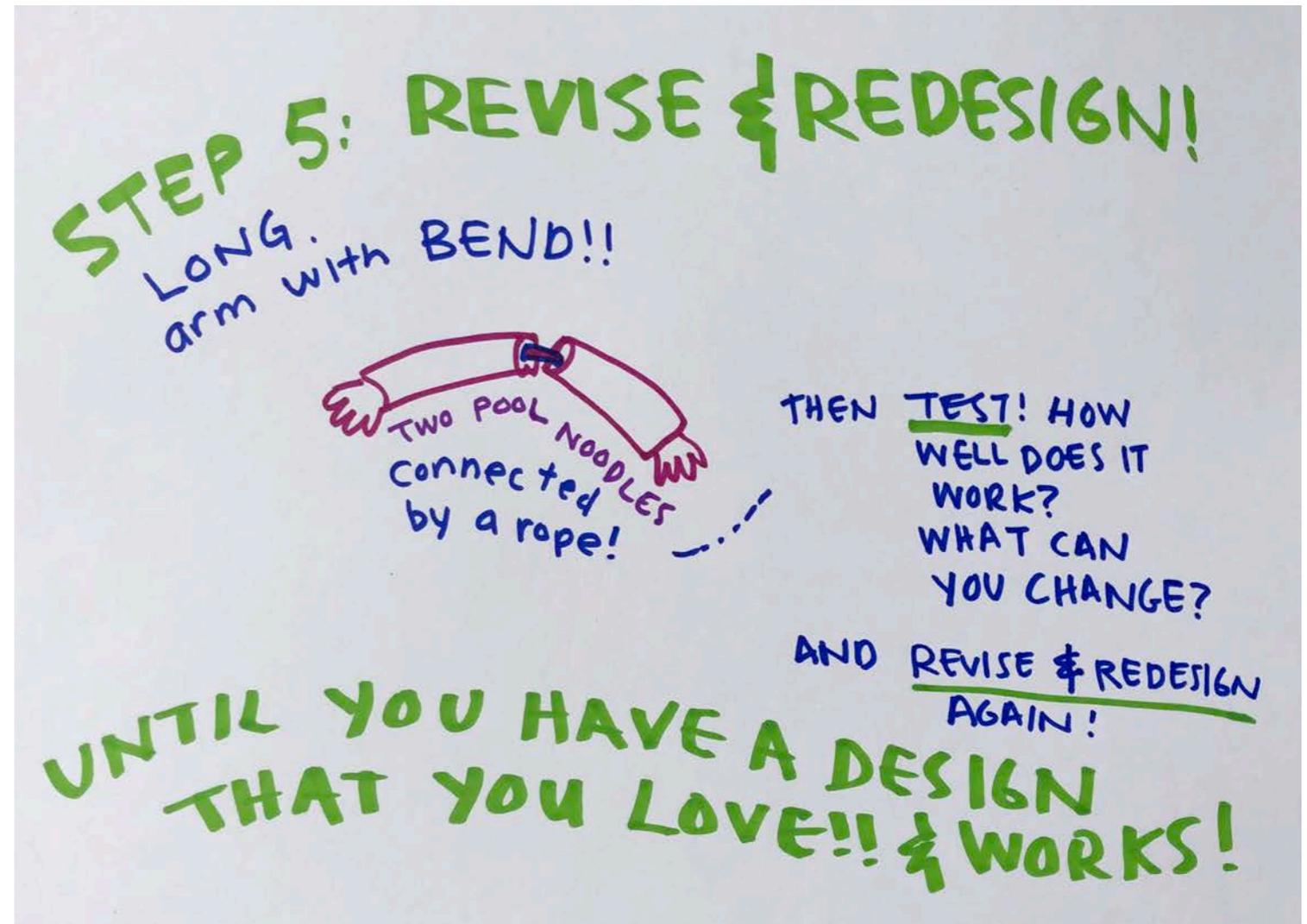
- Review! Show your friends and family! What do they think? How could you improve on your idea?



STEP 5

REVISE

- Now that you have input from your audience you can use that information to redesign and build your next model. Repeat steps 3-5 until you are satisfied.



STEP 6

SHARE WITH THE WORLD

- Bring your sculpture out into the public and see what the reactions are!
- Send pictures to your classmates friends and family
- Send me a picture of your sculpture in action j@sonicribbon.com

CHECK OUT MORE WORKS BY THE ARTIST AT

www.JessicaLingFindley.com



COMBINING ART AND ENGINEERING OBJECTIVES / STANDARDS

NGSS Standard Grades 3, 4, 5 & 6

- **3-5-ETS1-1** Engineering Design Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- **MS-ETS1-1.** Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

VAPA Standards

- **3.VA:Cr1.1** Elaborate on an imaginative idea.
- **4.VA:Cr3** Revise artwork in progress on the basis of insights gained through peer discussion.
- **5.VA:Cr2.1** Experiment and develop skills in multiple art-making techniques and approaches through practice.
- **6.VA:Cr2.3** Design or redesign objects, places, or systems that meet the identified needs of diverse users.



VOCABULARY

- Prototype
- Reiteration
- Design Thinking
- Reverse engineer
- Chindogu

CHINDOGU RESOURCE

- <https://www.chindogu.com>

CREATED BY ARTIST JESSICA LING FINDLEY
IN ASSOCIATION WITH COTA
(COLLABORATIONS: TEACHERS & ARTISTS)

MORE LESSONS BY THE ARTIST

www.JessicaLingFindley.com/lessons

