

Name \_\_\_\_\_

Date \_\_\_\_\_

## DESIGN PROCESS STEP 4: PROTOTYPE

### **Introduction**

Now that you've learned about a Nobel Laureate and the importance of their work in the world, it's time for *you* to take action to create the change in the world you wish to see.

You'll use the design process to complete your design challenge. Use this worksheet as a guide for the fourth stage in the design process: ideate. You may attach additional paper to this worksheet or use a notebook if you need more room for this step.

### **Step 4 of the Design Process: PROTOTYPE**

#### **What does it mean to prototype?**

To prototype means to build something quickly to test it out. You're not aiming for a final or "ideal" version of your solution yet, you're just trying to create something basic and close enough to your idea to test and get feedback. By prototyping you avoid spending too much time and resources developing something that might not work or that would be better with adjustments.

#### **1. Reflect to get focused**

Spend some time thinking about and answering the following questions before you begin to design your prototype:

#### **What is my theory or hypothesis?**

- Think: "By doing/creating/offering \_\_ (your idea) \_\_, I'll help address \_\_ (the problem) \_\_ for \_\_\_\_ (who or what? people/place)."

#### **What do I want to learn? How can I design a prototype that will help me learn what I want to know?**

- What are the parts of my idea that I'm not quite sure will work?
- How will getting answers to these questions through feedback help me improve my prototype?

**Who can I test this prototype with?**

- Ideally you can test your prototype directly with the community or place you are trying to help. If this is not possible, think about your next best options.

**2. Different ways to prototype**

All prototypes should be fast and quick to build with the aim of testing them out as soon as possible to get feedback and iterate. But depending on what you're designing, "building" your prototype can look very different. Here are some ideas for prototyping based on your idea:

Prototyping a product

Use materials that are easy to get, free or inexpensive, or something you can borrow and return. Build a basic model that will give people the idea of what your product would do. For example, if you are designing a new type of smart device, you can build it out of cardboard, and use colored paper, markers, stickers, beads, etc. to draw the screen and add the different buttons or features.

Prototyping a service or experience

Gather peers and role play to simulate the experience. Use or create quick props if needed to make the experience come to life. Practice what you'll say, ask, and do.

Prototyping a space

Build a 3-D model or create a blueprint. Depending on what you're creating you can use chalk or tape on the ground to mark out and label different spaces in a room or outside.

**3. Gather what you need to start building**

Take a few minutes to list the resources you'll need to develop your prototype.

Materials I'll need	Space I'll need	People I'll need

**Notes and Planning space**

Use the space on this page to record your notes, sketch your ideas, and jot down anything you want to remember to do while building your prototype.