



# BeAM COURSES

## Gathering Materials for Prototyping at Home

### What is low-fidelity prototyping?

A **low-fidelity prototype** helps you get an idea out of your head and into a physical representation, which you can use to get feedback from different audiences. It's called low-fidelity because it's not meant to be a polished version - it's a rough approximation of your idea that will help you visualize it. Prototyping helps you experiment with multiple approaches and ideas, gives people a visual that they can respond to, and reduces the risk of investing significant resources into an idea that might not work.

You can use prototyping for almost any type of maker project - whether you're constructing concept art out of cardboard to see how an audience interprets the design, or building multiple pipe cleaner prototypes to determine the best way to solve a problem.

To learn more about different types of prototypes, check out this resource from the Stanford School of Design: <https://dschool.stanford.edu/resources/prototyping-dashboard>

### What types of materials might I need?

When you're thinking about constructing a prototype, you want to think about gathering different types of materials that serve different functions in your design. You'll want **structural elements**, that will give your prototype its shape and structure. You'll want **joining elements**, which will hold all the elements of your prototype together. Finally, you'll want to think about **aesthetic elements**, which may not serve a structural purpose but could help convey meaning or clarify the use of your prototype.

Here are some examples of materials for each category that you might find in or near your home:

#### Structural Elements:

- Copy paper
- Cardboard boxes
- Cardboard tubes
- Wooden skewers
- Popsicle sticks
- Plastic bottles

Remember that natural elements from outside - like sticks, stones, shells - can also be incorporated into your design.

#### Joining Elements:

- Masking tape/duct tape
- Elmer's Glue
- Pipe cleaners
- Yarn or thread
- Paper clips/binder clips
- Velcro

Remember that adhesives (tape, glue, etc.) are only one way to join things - you can also create physical joins or tethers with wire, string, etc.

#### Aesthetic Elements:

- Markers/colored pencils
- Colored post-it notes
- Beads
- Buttons
- Stickers or labels
- Googly eyes

Aesthetic elements can be anything that you feel adds meaning to your design - whether that's an instructional detail on a product, or an element that tells a story.

One material that is frequently used for prototyping is **cardboard** - it's often free or cheap, simple to work with, and easy to find. For tips on working with cardboard, check out the guides [here](#) and [here](#).