All of this extra time inside is sure to inspire some interior redecorating. Whether you are decluttering or completely remodelling, there are some simple prototyping techniques available to help you through the design process!

Creating a prototype at home is as simple as gathering a few paper materials, tools, and taking the time to re-envision your surroundings. Or, if you’re a more digital visualizer, use the ideas listed here while exploring SketchUp, a free 3D modelling software.

RECOMMENDED AGE/SKILL LEVEL:

Recommended for children ages 4+ with adult supervision.

MATERIALS

- Plain paper
- Colorful paper
- Scissors
- Pencil
- Ruler and tape if desired
- Graph paper if drawing to scale

INSTRUCTIONS

- Choose a room to redesign (this could also be a cabinet, art wall, or closet).
  - To start, you'll also want to think about stakeholders in your design! If you live with someone else, for example, get their input as well - but don't feel the need to hash out everything at first. Your prototype will help you carry your ideas further. Take notes or make sketches if you have such a conversation.
- Sketch a rough or exact outline of your desired room. Depending on the stage of your prototyping, you can either approximate the space, or scale it exactly:
Draw an outline of your space on scratch paper. Measure all walls in inches using a measuring tape, writing down each measurement. Graph paper will help you scale. Sketch out the longest line in your space, noting its actual inch measurement, and then count the number of graph squares along that edge. Divide that inch measurement by the number of graph paper squares. Repeat this division process with the inch measurement of the other length of your room to fit it to your paper. Once you've ensured that both measurements can fit on the paper, make sure to write down your scale: 1 square - ___” or 1 square = X inches. For each wall, divide its physical inch measurement by the scale factor. The answer is the number of graph square lengths for that particular wall. Use a ruler as a straightedge to draw each line to scale. Measure any windows and other openings you wish to include, and measure and note their location along the walls. Use the same division process, and draw them in the correct place. Next, choose a new piece of graph paper. This will be the surface for your furniture. Measure width and length for each relevant piece of furniture. Divide measurements by the same factor and plot them on the graph paper. Color, hash mark, and/or label each piece of furniture. Cut out the furniture carefully and arrange them within your space.

• Sketch and cut out the components of the room on colorful paper.
  - If you don’t have colorful paper, make some hash marks on white paper to create a background and cut these out. The shapes will vary, depending on what you focus on.
• Lay out your design elements within the “space” as they currently are. Mark their placement with a pencil if you wish. Decorate your design elements if this helps you visualize them.
• Begin to experiment - move your components around in new ways. They may even feel ridiculous, but try out many different ones. Document them if you wish, and tape down any elements as you go that will help you solidify your plans.

• Once you’ve developed a prototype, you can move ahead by refining your ideas, as outlined in the steps illustrated in this course. IDEO calls this “experimenting forward.” Now that your thoughts and concepts are flowing and perhaps reinvented, you can add in details, responses to visual feedback, and more.

**ADDITIONAL RESOURCES**

**CONNECT SOCIALLY AND LEARN MORE**

**Facebook & Instagram:** @MuseumofCraftandDesign  
**Twitter:** @SF_MCD  
**Share your project!**  
Post and tag #MCDatHome

**Websites**  
[Design Thinking: Get Started with Prototyping](#)  
[How to Draw a Floor Plan to Scale on WikiHow](#)  
[How to Draw a Floor Plan to Scale on OurRepurposedHome.com](#)