Dive into one of the design challenges of Girls Garage, based on plan, section, and elevation. These are types of drawings that architects use, but you can also use them to describe any kind of 3-dimensional object. These visual exercises will also help you look at the world differently!

More paper model and building design challenges can be found at girlsgarage.org. You can also follow along with an apple version of this challenge on Instagram!

RECOMMENDED AGE/SKILL LEVEL:

Recommended for 8+ with adult supervision for cutting.

SUGGESTED MATERIALS

- Bell pepper (can substitute apple or orange)
- Pencil, pen, or marker
- Paper
- Knife
- Cutting board

INSTRUCTIONS

Plan, section, and elevation are types of drawings that builders use to communicate how a building should be built, looking at it from different angles. This visual reference gives you guidelines as you work, showing size and how things are put together.
• With your paper oriented in “landscape,” create three headings for Plan, Section, and Elevation.

• Just like a floor plan, your plan will show the view of the pepper from above. A floor plan is not usually a true bird’s-eye view, since you are often looking at a horizontal slice through the walls of the house (rather than the roof). However, in this case, we are capturing the top view of the pepper, as-is.

• What do you see when looking down? Draw the overall shape and add details. This doesn’t have to be a portrait - it should just accurately describe the shape, features, proportions, and any other markings.

• A section refers to a cross-section of any object. In a floor plan, this would show you the stairs, interior of the walls, and more. You could make many different cuts to create a cross-section, though a vertical cut is often chosen in this exercise.

• Grab your pepper and carefully make the cut.
Choose one of the sections and focus on it, drawing seeds, interior, and any other quirks.

The elevation is a side view of the pepper. Draw it from the side at eye level, again noting any details that you can see. Consider drawing other side views as well if those are very different from the one you chose.

### ADDITIONAL RESOURCES

**CONNECT SOCIALLY AND LEARN MORE**

- **Facebook & Instagram:** @MuseumofCraftandDesign @_girlsgarage
- **Twitter:** @SF_MCD
- **Share your project!** Post and tag #MCDatHome
- **Related Websites:** [www.girlsgarage.org](http://www.girlsgarage.org)