



SCIENCE FAIR CENTRAL

Feeding the Future

Ages 5-12

OVERVIEW

The Home Depot's Kids Workshops program is celebrating its 25th anniversary! Thanks to innovations across all areas of life, the world has changed a lot since The Home Depot released their very first Kids Workshop activity in 1997. The kids who were making and doing at The Home Depot's Kids Workshops back then are now adults who make positive impacts on our world in 2022.

Looking 25 years into the future, you too will have the power to make big impacts on the world and the people around you. Thinking ahead 25 years, what could you build and do TODAY to have an impact on our world when we're ready to celebrate the 50th anniversary of The Home Depot's Kids Workshops?



Image from urbanorganit.com



Image from <https://gardenerspath.com/how-to/design/vertical-gardening-works-everyone/>

MAKE. CREATE. EXPLORE.

www.ScienceFairCentral.com



BACKGROUND

Imagine that the year is 2047 and cities are becoming more and more innovative. Apartment buildings are starting to create their own gardens so they can grow food for the people who live there. These gardens are placed inside the buildings, and they are built up and down instead of being spread out across land. This is called vertical farming, and it helps more food be grown in less space!

MATERIALS

- Planning for the Future sheet
- Straws
- Craft sticks
- Pipe cleaners
- Quick-dry clay or playdough
- Foil
- Cardboard boxes
- Scissors
- Paper
- Pencils
- Crayons
- Craft glue
- Tape

ACTIVITY (30 MINUTES)

Read through the directions on the Planning for the Future sheet. Then kick off the activity by collaborating to recap the challenge, brainstorm solutions, and sketch your ideas. Once your family has a favorite design, work together to create a 3D prototype using the materials above.

PLANNING FOR THE FUTURE

Directions: Pretend you are a team of landscapers and landscape architects. It is your family's job to create a model of an apartment building with a vertical garden that will help feed the people who live there. Your model should show *where* the garden will be in the building, as well as *how* it is laid out and *what* will be grown there. You may use the images provided as inspiration!

Questions to discuss:

- How can you use the least amount of space to produce the most amount of food?
- Can your garden recycle or reuse water?
- How will your garden receive sunlight?
- Will you include fish or other living things?

Are there any future innovations you can “invent” that may help your garden?

Recap: What is your goal?

Prototype: Choose one or two of your family's favorite ideas and sketch them below. Then work together to create a 3D model of the one you think will work best.

Brainstorm: What ideas do you have?

