

Engineering Design Challenge - September 2024

Harvesting Challenge

- Identify or Define the Problem
- Generate Ideas
- Identify Best Idea Based on Constraints
- Design and Build a Prototype
- Evaluate Tests
- Iterate and Redesign
- Explain Results

Explore the LEGO® Education [Career Toolkit](#) for inspiration. Consider checking out the [Rebuild the World with Agriculture](#) and [Rebuild the World with Bee Rescue](#) sections for inspiration.

Explore the LEGO® Education SPIKE™ Prime [Protect our Produce](#) lesson. Think about the engineering design process and inventing your own solution that harvests produce from a tree.

Design your own invention using LEGO® bricks or whatever materials you have available to you.



Challenge

Design an invention to harvest a crop safely, effectively, and efficiently.

- As fall approaches, many people enjoy going apple picking or to the pumpkin patch.
- What types of crops grow in your area? How are those crops harvested?
- In this Engineering Challenge, your task is to develop a model that can harvest a crop.



- Consider speed, effectiveness, and safety of the crops and operators.

- Test and iterate on your designs.

Use each step of the Engineering Design Process to complete this challenge.