Engineering Design Challenge - November 2024

Leaf Collector



Engineering Design Process

- 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

Need inspiration?

Explore the LEGO® Education SPIKETM Essential lesson called <u>Big Little Helper</u>. Use the models as inspiration for your own leaf collection helper.

Explore the LEGO® Education SPIKETM
Prime lesson <u>Out of Order</u>. Think about the engineering design process and how to invent your own leaf delivery cart.

Design your own version of a leaf collector using LEGO® bricks or whatever materials you have available to you.



Design a model that can help collect leaves during autumn.

- As the weather gets colder in many parts of the world, some trees lose their leaves. It's fun to rake a big pile of leaves and jump in. However, those leaves can also be a nuisance.
- Can you create a robotic assistant to help collect or transport leaves? What features will you add to your creation to make this task easier and more efficient?
- Remember iterating and redesigning are important steps. Test your creation and make changes to improve the model and code.

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

