Engineering Design Challenge - May 2024 Springtime Solutions

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?

Consider exploring the LEGO[®] Education SPIKE[™] Essential **Animals in Their Habitats** lesson. Examine the needs of animals and plants and how they survive in different environments.

Alternatively, explore the LEGO[®] Education SPIKE[™] Prime <u>Veggie Love</u> lesson to review weather data and to determine if it can help forecast the needs of plants in our area.

Spring is here! Are there flowers blooming in your community? Has the weather changed in your area? What other changes do you notice during spring?

Can you design, build, and program a model to represent an aspect of springtime? You can design a flower that blooms locally, a representation of the weather you are experiencing, or anything that you can imagine.

Alternatively, design a solution to a problem in your community during springtime – maybe there is too much water from rainfall or not enough. How can you solve this issue?

Share your design with a peer. Can they tell what aspect of spring your creation represents? Explain the design and programming choices you made.



Challenge

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

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