

I wonder how to grow food sustainably?



Wonder
Project

Plant
Challenge

The Wonder Project is Engineering New Zealand's free programme for schools, designed to get young Kiwis excited about science, technology, engineering and maths (STEM).

In New Zealand, there's a huge skills shortfall in STEM. We simply don't have enough young people pursuing careers in these fields. These jobs pay well, are secure – and you don't always have to go to university. The Wonder Project aims to change this shortfall by showing young Kiwis they really can do anything.

The Wonder Project is a series of project-based hands-on programmes that knit seamlessly into the New Zealand school curriculum. They're designed to spark wonder and awe in young Kiwis from Year 5–13 and get them excited about a future STEM career.



POWERED BY **CallaghanInnovation**
New Zealand's Innovation Agency

Plant Challenge

Let's grow! Students work together to experiment, test and build a microgreen farm of the future. They'll learn what plants need to grow, build a hydroponic grow house and use technology to measure their success.

Your child's school has sign up to take part in the Plant Challenge this year. Over Term 4 they'll learn what plants need to grow, build a hydroponic grow house and use technology to measure their success.

What your child will learn

Your child may bring home some weird and wonderful new words and concepts – so it's good for you to be familiar with them too!

Quantitative and qualitative data

Quantitative data is information in the form of numbers, or quantities. They'll learn how to use sensors to measure and collect quantitative data on:

- Temperature (how hot their growing environment is)
- Light (the amount of sunshine their greens get)
- Humidity (the level of water vapor in the air)
- Conductivity (the nutrient levels of their growing environment)

Qualitative data is information you observe by using your five senses:

- Sight
- Smell
- Sound
- Taste
- Touch

Design Thinking process

They'll learn how to think like an engineer, using the '4 Ds' of Design Thinking:

1. Discover
2. Design
3. Develop
4. Deliver

What you can do to help

- Ask about their microgreen trials
- Talk about new words and concepts they're learning
- Ignite curiosity with some simple experiments at home – check out nanogirl.co
- Add another book to your reading list with *The Awesome A-Z Of How Stuff Works* – order from shop.wonderproject.nz

Ignite your wonder today at wonderproject.nz

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