



NextWaveSTEM

# Budding Botanists: Hydroponics for Young Gardeners

Designed for learners in Grades K-2



## Course Description:

Through hands-on activities, students will explore many aspects of plants, their needs, & various growing conditions. Over 15 lessons, early elementary students will record their observations & data from their own plant's progress so students can discover the unique traits of plants and their growth while beginning to delve into the exciting science of hydroponics.

## LESSONS



## LEARNING TARGET EXAMPLES

1: Parts of a Plant	Introduction into what a plant is through a photograph
2: Investigate Seeds	Exploring various seeds and parts of a seed
3: Around We Go	Exploring stages of a plants life cycle
4: Let's Grow!	Concept of germination & how a seed grows
5: Give 'Em What They Need	Understanding the needs of a plant: eg nutrition
6: Give 'Em What They Need - Part2	Understanding additional needs like light and air
7: Take Root	Exploring the idea of water absorption
8: Water Water Everyone	Update observations on previous experiments
9: What's for Dinner	Students explore what plants we eat, and what plant family they are from
10: Hello, Bug	Watch a video to set a purpose for days lesson
11: Off and Away	Engage in thinking questions to set purpose
12: Hungry Hungry Plants	Set questions that will assist in learning
13: Go Green	Engage in a quick draw to set a purpose for a lesson
14: Adapt	Engage in thinking questions to set purpose
15: Biodiversity	Engage in a biome walk listing living plants around

## Equipment, Curriculum, and Training Available:

- 15 Lesson Hours
- Curriculum and supporting materials
- Ongoing product and curriculum support
- Professional development
- Facilitation by a trained STEM instructor (optional)