MICROGREENS WORLD
NUTRITION | SCIENCE | TRENDS

K through 6 Microgreens Curriculum

Integrating microgreens into a K-6 curriculum offers students hands-on learning experiences that align with educational standards and promote food literacy.

Here's a structured approach to implementing a two-week radish microgreens project:

Project Timeline:

Day	Stage	Objective	Activities
Day 1 Monday	Preparation	Introduce students to microgreens and prepare for planting.	Discuss the concept of microgreens and their nutritional benefits. Review the growth cycle of radish microgreens. Prepare materials: shallow containers, potting soil, radish seeds, spray bottles.
Days 2-3 (Tuesday-Wednesday)	Gemination	Initiate seed germination in a controlled environment.	Students evenly distribute radish seeds over moistened soil in containers. Cover containers to maintain darkness and humidity, essential for germination. Place containers in a warm area, checking moisture levels daily.
Days 4-5 (Thursday-Friday)	Early Growth	Support initial sprout development with appropriate lighting.	Remove covers to expose sprouts to light. Set up grow lights approximately 12 inches above the trays, programmed for 16 hours on and 8 hours off. Ensure consistent moisture by lightly misting soil as needed.

Days 6-7 (Saturday-Sunday)	Development	Enhance growth through increased light exposure.	Adjust grow lights to 9 inches above trays, increasing light exposure to 18 hours on and 6 hours off. Continue monitoring moisture levels, watering as necessary.
Day 8 (Monday)	Harvest and Tasting	Harvest microgreens and engage in sensory evaluation.	Students harvest microgreens by cutting stems just above the soil surface. Wash and taste the microgreens, noting flavor profiles and textures. Discuss the potential culinary uses of microgreens.
Day 9 (Tuesday)	Reflection and Reporting	Reflect on the growth process and document observations.	Students compile a report detailing each growth phase, challenges faced, and outcomes. Include photographs taken throughout the project to visually document progress. Present findings to peers, fostering communication skills and knowledge sharing.

See the article Teaching Kids About Plant Life Cycles with Microgreens: A Fun and Educational Guide at Microgreens World

Hands-On Activities:

Soil-Based Planting	Utilize shallow containers filled with potting soil for planting radish seeds. This method is straightforward and suitable for classroom settings.
Taste Tests	Encourage students to sample the harvested microgreens, promoting discussions about taste, texture, and potential health benefits.
Documentation	Maintain a growth journal where students record daily observations, including sprout height, leaf development, and any anomalies.

STEM Connections:

Science	Explore plant biology by observing germination, photosynthesis, and plant anatomy.
Technology	Incorporate the use of grow lights and timers, discussing the role of technology in modern agriculture.
Engineering	Design and set up the growing system, considering factors like light placement and watering mechanisms.
Mathematics	Measure growth rates, calculate germination percentages, and analyze data trends.

Food Literacy and Nutrition

Nutritional Education	Discuss the health benefits of consuming microgreens, including their vitamin and mineral content.
Culinary Applications	Brainstorm ways to incorporate microgreens into meals, enhancing students' appreciation for healthy eating.

Existing Programs and Resources:

Aquatree Educational Packages:

Aquatree offers indoor hydroponic gardens designed for classroom use, providing hands-on learning experiences that align with STEM curricula. Their systems are compact, user-friendly, and facilitate the growth of nutrient-dense crops like microgreens within a week.

Aquatree | Hydroponic Garden Grow Tower: Microgreens & Lettuce

Oregon State University's Microgreens Kits:

The Klamath County Extension Farm to School and SNAP-Ed program provides microgreens grow kits tailored for classroom settings. These kits include all necessary materials and support experiential learning.

Growing Microgreens in the Classroom | Farm to School and Nutrition Education

Microgreens | Food Hero | Educational Resources

KidsGardening Resources:

KidsGardening.org offers comprehensive guides on growing microgreens in classrooms, detailing step-by-step instructions and educational benefits.

Microgreens - KidsGardening

By implementing this structured project, educators can provide K-6 students with a multifaceted learning experience that encompasses plant biology, sustainable agriculture, nutrition, and practical skills.