



GO Plants!

A Plant Science Unit for 4th Grade Classrooms

The 4-H *GO Plants!*—Growing Opportunities with Plants program—engages fourth grade students in the exploration of plant-science topics through a variety of science skill-building activities. The teaching strategy encourages inquiry-based learning, the active use of science skills, and the use of creative and critical thinking skills. This includes planting, growing, and maintaining plant materials in the classroom under grow-lights or in a window-garden.

GO Plants! activities are designed with the busy teacher in mind. This five-week, five-lesson unit focuses on a specific part of the plant each week: seeds, roots, stems, leaves, and flowers. Lessons are designed to be taught in 60-minute intervals, with the potential to expand to 120 minutes if optional Digging Deeper and Going Beyond

activities are conducted. The book includes student-ready worksheets and fact sheets to enrich the classroom experience. These materials were developed with a range of reading abilities in mind; however, the content and the activities contained that are appropriate of the fourth-grade level.



GO Plants! was developed by professional staff at The Ohio State University as part of the Science Alive 4-H School Enrichment program. For information on the availability of this unit in your classroom, contact your county's OSU Extension office.

Visit us on the web at www.ohio4h.org/sciencealive

Go Plants!

Grade 4—Ohio Academic Content Standards and Indicators, 2007

Life Sciences

Heredity	1. Compare the life cycles of different plants including germination, maturity, reproduction and death.	X
Diversity and Interdependence of Life	2. Relate plant structures to their specific functions (e.g., growth, survival and reproduction).	X
	3. Classify common plants according to their characteristics (e.g., tree leaves, flowers, seeds, roots and stems).	X
	4. Observe and explore that fossils provide evidence about plants that lived long ago and the nature of the environment at that time.	
	5. Describe how organisms interact with one another in various ways (e.g., many plants depend on animals for carrying pollen or dispersing seeds).	X

Scientific Inquiry

Doing Scientific Inquiry	1. Select the appropriate tools and use relevant safety procedures to measure and record length, weight, volume, temperature and area in metric and English units.	X
	2. Analyze a series of events and/or simple daily or seasonal cycles, describe the patterns and infer the next likely occurrence.	
	3. Develop, design and conduct safe, simple investigations or experiments to answer questions.	X
	4. Explain the importance of keeping conditions the same in an experiment.	X
	5. Describe how comparisons may not be fair when some conditions are not kept the same between experiments.	X
	6. Formulate instructions and communicate data in a manner that allows others to understand and repeat an investigation or experiment.	X

Scientific Ways of Knowing

Nature of Science	1. Differentiate fact from opinion and explain that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.	
	2. Record the results and data from an investigation and make a reasonable explanation.	X
	3. Explain discrepancies in an investigation using evidence to support findings.	X
Ethical Practices	4. Explain why keeping records of observations and investigations is important.	X

Ohio State University Extension embraces human diversity and is committed to ensuring that all educational programs conducted by OSU Extension are available to clientele on a nondiscriminatory basis without regard to race, color, age, gender identity or expression, disability, religion, sexual orientation, national origin, or veteran status.

Keith L. Smith, Associate Vice President for Agricultural Administration and Director, Ohio State University Extension.

TDD No. 800-589-8292 (Ohio only) or 614-292-1868