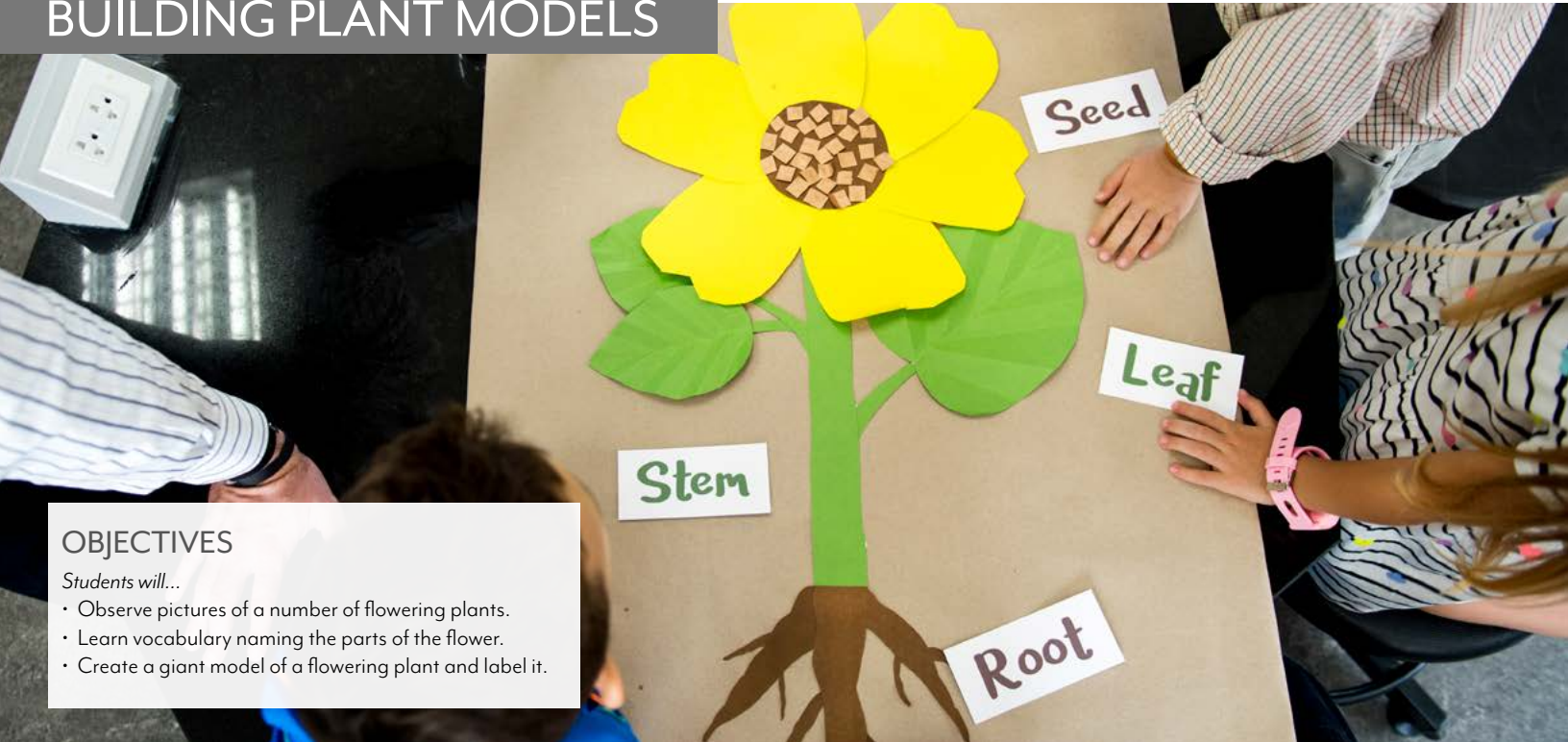




BUILDING PLANT MODELS



OBJECTIVES

Students will...

- Observe pictures of a number of flowering plants.
- Learn vocabulary naming the parts of the flower.
- Create a giant model of a flowering plant and label it.

MATERIALS

- Pictures of flowering plants cut from magazines, gardening, catalogs, calendar, phone, or internet (research).
- Foam Flower Model (SB31406)
- Watch It Grow Book Collection (EL10977)
- Large Pieces of Construction Paper or Roll Paper
- White Paper for Labels

STANDARDS

K-LSI-1— Use observations to describe patterns of what plants and animals (including humans) need to survive.

K-ESS3-1— Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.

1-LS1-2— Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

ACTIVITY

- Divide the class into groups of four. Explain that each group will make a flowering plant at least 2 ft. tall and will label the parts of the plant.
- Using the Foam Flower Model, students will explore the structure and function of the flower. Point out different parts of the flower and introduce vocabulary (i.e. roots, stem, leaves, etc...). Allow time for students to collaborate for 5 minutes on what each part's function is and then discuss as a class to confirm. Make sure students use their observations and evidence (as much as possible).
Optional: Prior to the introducing flowers, students can bring in examples of plants they have seen or images (taken or researched). Alternatively students can explore their own environment around the school. A predetermined location with diversity works best.
- Hand out a book to each group from the *Watch It Grow* Book Collection. Groups can read independently or as a small group. Additional books may be needed if there are more than 5 groups of students (Note: students can read this book collection or something similar that includes plants and animals). Allow students to explore these books and come up with some unanswered questions they have that they want to discuss, but also have them think about the following types of questions:

What kind of environment / habitat does the plant or animal grow in?

Does the animal or plant grow during certain seasons or all year long?

What kind of things does the plant or animal eat / drink? Does the plant or animal need water and/or food?

Does the plant or animal need the sun and/or soil?

Alternative Option: students can read a book and/or do independent and group research on plants:

<https://garden.org/plants/>

<https://www.gardeningknowhow.com/special/children/how-plants-grow.htm>

- Students will ultimately read and explore parts of their plant and build a model of the plant they read about. After the model is built students will need to label each part along with an explanation of its function.
- When each group's model is complete have students share with the class. As a class, discuss similarities and differences of each plant.

TAKE AWAY ACTIVITY / EXTENSIONS

A good take away activity is to provide the students with a thought-provoking question. As a homework assignment have students answer "What is the most important part of a plant and why?"

Answer: All parts of a plant are important and have a specific job to do, similar to other living things. The roots absorb water and nutrients, along with providing stability (anchor). The stem provides support while carrying nutrients to the rest of the plant. The leaves make food from the process of photosynthesis. Flowers are for reproduction (multiplying).

Go over as a class why roots, stems, leaves, and flower are all equally important, allowing students to reinforce what they have learned. This discussion can lead to introducing or doing lessons on the following:

- Life cycles
- Habitats and environments necessary for growth and why diversity exists
- Experimentation with what is the most important ingredients for plant growth
- What are the internal structures of plants and how does that affect survival, growth, behavior, and reproduction
- Inherited traits influenced by the environment

CHECK OUT THESE OTHER GREAT PRODUCTS FROM NASCO!



Raised Relief

Foam Flower Model

Resilient, nontoxic EVA foam and removable pieces for hands-on use with students of all ages. Detailed teacher's guide includes background information, reproducible worksheets, cross-curricular extension activities, assessment ideas, and more. ⚠ CHOKING HAZARD (1). Not for under 3 yrs. **SB31406**

Root-Vue Farm™

Self-watering grow unit with angled acrylic viewing window for easy viewing of carrot, radish, and onion roots. Unit also has built-in water basin and drainage reservoir, light shield that keeps plants growing but can be removed for viewing roots, 8 super-expanding grow mix wafers, 3 packets of seeds, identification labels, and 16-page booklet with instructions and experiments. ⚠ CHOKING HAZARD (1). Not for under 3 yrs. **SB22804**



Root, Stem, and Leaf Model

3-D model shows cross-section view of root as it penetrates soil, typical dicot stem partially dissected, and cross-sectioned leaf with various layers indicated. 18" x 24". Teacher activity binder contains lesson plans for class and individual study, blackline masters, and a transparency.

SA02747

CHOKING HAZARD (1) ⚠ **WARNING: CHOKING HAZARD** – Small Parts. Not for children under 3 yrs.

CHOKING HAZARD (3) ⚠ **WARNING: CHOKING HAZARD** – This toy is a small ball. Not for children under 3 yrs.

Lesson Plans are developed with teachers with no claim of original authorship.



Leaves and Seeds of Common Trees Identification Mounts

Each species is represented by both leaves and seeds. Leaves and twigs are pressed. Fruits have been freeze-dried. Each 5" x 8" mount is labeled on back with common and scientific names, family, leaf arrangement, leaf type, tree size, fruit type, natural habitat, and a range map for the U.S. 16 mounts in 6" x 15" flip bin.

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