

# Tops & Bottoms

## PROGRAM OVERVIEW



### Objectives

#### NGSS/MLS for K-2:

- LS1.A - Structure and function
- LS1.C - Organization for matter and energy flow in ecosystems
- LS2.A - Interdependent relationships in ecosystems
- ESS2.E - Biogeology

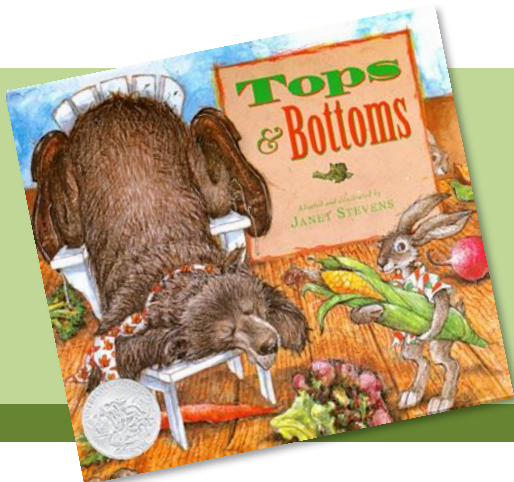
#### MO Early Learning Standards

- I. Physical Science
  - A. Explore, Investigate and Solve Problems of the Physical World
- II. Life Science
  - A. Explore, Investigate and Solve Problems of Living Things
- III. Earth Science
  - A. Explore, Investigate and Solve Problems of the Earth and Sky

### About the Program

Our most popular Garden Class program for Kindergarten through 2<sup>nd</sup> Grade, the Tops & Bottoms program is a great way to introduce students to the parts of a plant. During this program, your students will:

- **Hear the story of Tops and Bottoms by Janet Stevens** (as a pre-visit activity to introduce them to how plants grow).
- **Learn about the six major plant parts** (root, stem, leaf, flower, fruit and seed) and their characteristics.
- **Participate in the planting** of a “pretend garden” in your own classroom prior to visiting the Garden.
- **Explore the Kemper Center for Home Gardening** in small groups led by one of our instructors to see how vegetables and other useful plants are grown in Missouri.
- **Participate in Pot-a-Plant** (on Garden grounds or in your classroom) to observe seeds as they grow inside their own personal greenhouse.



### About the Book

Janet Stevens' Caldecott medal-winning sequel to Aesop's fable 'The Tortoise and the Hare' tells the next chapter in Hare's life. Pitting his cleverness against the laziness of his neighbor, Bear, Hare and his family use his knowledge of how plants grow to trick Bear and claim the best parts of their shared harvest. A fun and amusing read, this story provides a foundation upon which the program builds a connection between the familiar vegetables we eat and the plant parts they represent. Stevens is both the author and illustrator of this story.

# This Program Features:

## The William T. Kemper Center for Home Gardening

The William T. Kemper Center for Home Gardening includes 23 distinct demonstration gardens ranging from bird and butterfly gardens to an impressive vegetable garden and a garden for children! The outdoor portion of *Tops and Bottoms* brings students here to witness familiar food plants at different stages of growth, see their pollinators in action, and explore the flowers and trees that grow well in St. Louis' unique climate. Teachers are encouraged to consider the Kemper Center a resource for ideas when planning their own school gardens.



### Other Places to Explore...

Make the most of your visit by taking your students to explore the following areas after your program:

1. **The Climatron™** - Take a walk through the Garden's own tropical rainforest in the Climatron™ conservatory!
2. **The Victorian District** - Enjoy a walk around the ornate Victorian gardens. Henry Shaw's country home and the Kaiser Maze are also located in the Victorian District, however, both are closed during this time.
3. **The Japanese garden** - This long loop showcases Japanese culture's fixation with temporary enjoyments of nature, meaning that over the course of the year visitors can hope to see flowers, fruit, colorful leaves, or shaped branches.

### Logistics for Teachers

- ✿ Each *Tops and Bottoms* program is approximately **90 minutes** on Garden grounds and 30-45 minutes for pre and post activities (prior to and after visiting the Garden). This program serves a maximum of **60 students**.
- ✿ Program fees include admission for up to six adults per 30 students. (Additional adults will be charged normal admission rates.) Please try to bring at least **one adult for every five students**.
- ✿ Currently no lunch space exists on Garden grounds and picnicking is prohibited. Please schedule your visit and meal times accordingly.
- ✿ Availability for *Tops and Bottoms* is limited! Book early!

For more information, or to book this program, please visit <https://www.missouribotanicalgarden.org/learn-discover/students-teachers/school-programs-and-field-trips> or call the School Programs office at 314-577-5185.



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