

Seasonal Focus Lab (3rd-5th)

During this 2 hour tour, students have the opportunity to experience science first-hand in the Garden's Plant Lab. Groups will have 30 minutes in an instructor-led lab to explore using our Zeiss microscopes, models, and dissecting equipment to view plant structures in a whole new light! Outside of the lab, our experienced docents will illuminate some of the amazing adaptations of our California native plants. Each tour utilizes inquiry-based teaching methods to engage students with the natural world and inspire curiosity with their surroundings.

The Santa Barbara Botanic Garden's tours are aligned with Next Generation Science Standards (NGSS). The Seasonal Focus Lab showcases the seasonal highlights while focusing on teaching students about plant structures and functions. See below for details.

Structure & Function

Plants and animals have internal and external parts that help them survive. Many of California's native plants have developed special adaptations that enable them to thrive here.

In the lab:

- Students are equipped with basic lab equipment and are stationed with their own Zeiss dissecting scope.
- A staff instructor leads an examination of various plant structures and how these aid in their survival.
- Students have the opportunity for free exploration – examining materials in the lab or found on their tour at their leisure.

Key tour concepts:

1. Plants and animals have structures that function to provide needs that support an individual's growth, survival, and reproduction.
2. Living things need food and water to survive and live in places that support their needs.
3. Organisms inherit traits from their parents which causes differences between individuals. Over time, the traits that are passed through multiple generations can lead to organisms developing adaptations that help a species survive in a given environment.
4. Habitats are never stagnant; they are dynamic environments that are constantly in flux due to changes in weather, organisms, and landscape. Environmental changes may cause some organisms to thrive while others die.
5. Humans depend on plants for food and resources and could not survive without them.