

Vocabulary

Chlorophyll: The green plant pigment that makes photosynthesis possible.

Conifer: A cone-bearing plant, usually evergreens like pine or fir.

Deciduous: A plant that sheds all its leaves in one season.

Decomposition: The breaking down of organic matter.

Evergreen: A plant that retains its leaves for more than one growing season.

Herbaceous: A plant with a green, non-woody stem that usually dies back in winter.

Nutrients: Minerals in the soil that help trees and plants survive and thrive.

Photosynthesis: is a biochemical process in which plants, algae & some bacteria harness the energy of light, using carbon dioxide and water, to produce food, ie: carbohydrates (sugars) and oxygen.

Soil: Made up of minerals, organic materials (like poop and decaying leaves and animals), insects and worms.


Stomata: Tiny openings or pores on leaves (usually on the underside) that take in and let out gases (carbon dioxide and oxygen).


Transpiration: The process by which a tree brings water from the roots and releases water through the stomata.

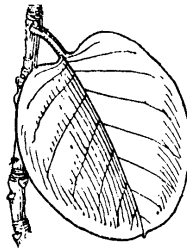
Woody Plant: A plant that can live for many years, building up a woody core and covered with protective bark.

To help your students make the most of their trip to Meerkerk Gardens, here are some suggested activities:


Before your Botany Adventure Tour:

 Make a chart to list your favorite trees and what you know about them.


 Ask your students what they are expecting or hoping to see while on tour at Meerkerk Rhododendron Gardens.





After your Botany Adventure Tour:


 Create bark or leaf rubbings


 Design a 'new' tree

 Plant a tree or adopt one nearby

 Make a presentation to a gardening organization about what you have learned

 Create an informational poster or brochure about the importance of trees

 Research the origins of photosynthesis. What other types of organisms utilize photosynthesis?

 Find a tree in your schoolyard or home garden that needs help. Make recommendations that will help make the tree healthier.

Meerkerk Gardens

Whidbey Island's peaceful woodland garden, living museum & outdoor classroom presents:

The Life of a Leaf



A Botany Adventure School Program Grades 3-5



With support from:

Debbi and Paul Brainerd

Greenbank Garden Club

Kiwanis Club of South Whidbey

Lucky Seven Foundation

Meerkerk's 'Dreams of Spring'

South Whidbey Garden Club

South Whidbey Rotary

Tulalip Tribes

WalMart Community Fund

and our dedicated volunteers!

Meerkerk Gardens

encompass ten acres of display, educational, and research gardens enveloped by forty-three acres of forest preserve with nearly 5 miles of nature trails. Meerkerk Gardens is a not-for-profit organization, an outdoor classroom and living museum.

Our Botany Adventure Tours are inquiry-based, guided science programs conducted at Meerkerk Gardens and in the classroom. Botany Adventure currently introduces students in grades 3-5 from all school backgrounds to plant growth and development through a series of a series of 1-2 hour seasonal tours in the “outdoor classroom.”

Teachers also have the option of a pre-tour or post-tour visit from Meerkerk staff to help students connect their field trip experience with their classroom activities and everyday lives.

Botany Adventure School Programs feature hands-on, child-centered activities and are aligned with Washington State Essential Academic Learning Requirements. All programs emphasize the fact that outdoor experiences contribute to the health and well-being of children. The common thread woven through all programs is the interdependence of life on earth.



We invite your class to...

...join us in discovering how Nature changes during autumn by taking a Botany Adventure Tour through the Meerkerk Gardens.

Experience the vivid fall colors and fragrances, learn how plants make food and how they breathe and observe animals and plants preparing for the winter months ahead.

The *Life of a Leaf* program is designed to help students understand:

1. The mission and importance of Meerkerk Rhododendron Gardens introducing botanical science and horticultural arts to children.
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2. The processes of photosynthesis, transpiration and decomposition.
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3. That plants are important to the well-being of all living things on earth.
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4. That people can positively or adversely affect the ability of trees and plants to survive.



Botany Adventure 2006 Circle of Life

The Life of a Leaf

We offer two types of educational experiences for your class:

The *Life of a Leaf Botany Adventure Tours* are offered on selected weekdays during September and October from 10:00 – 11:30 or from 12:30-2:00.

Classes may choose to start or end their tour with a picnic lunch.

Minimum Group size: 8 students

Maximum Group size: 30 students

Fee: \$3.00 per student

There is no fee charged to teachers & chaperones.



The *Life of a Leaf Botany Adventure Tours + Classroom Visit:* Our horticultural staff would love to visit your classroom before your tour to prepare students for what they will see in the Garden *or* after your tour to help them complete a project.

Fee for Tour + Classroom Visit: \$5.00 per student

Financial assistance for students is available.

Contact Meerkerk Gardens:
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