



## Looking at Leaves

### Pre-Program Curriculum Resource Guide 3rd-5th

Thank you for selecting Myriad Botanical Gardens to enrich the learning of your students. Our school programs supplement achievement towards the Oklahoma Academic Standards. Through the implementation of research-based methods and models, we strive to provide the most enriching experience possible.

**Looking at Leaves—Exploring leaves with art and science, is intended to empower students to discover more about the natural world by accomplishing the following learning objectives:**

Students will learn how different leaf shapes, colors and textures help plants survive in different environments.

Students will complete an art project using leaves as their inspiration. Students will identify leaf adaptations with a conservatory scavenger hunt.



#### Program Overview

Program Overview	Timing (variable)
1. Welcome and Introductions	10 minutes
2. Lesson: Leaf Adaptations Journal	30 minutes
3. Leaf Art Project	30 minutes
4. "Looking at Leaves" as a Conservatory Tour and Scavenger Hunt	30 minutes
5. Conclusion, Children's Garden free play, lunch Free play and lunch is self-guided	30 minutes

Your educational program will last 90-120 minutes. Groups are welcome to explore the garden grounds before and after your program at your leisure.

#### Program Objective

Students will gain an understanding of leaf adaptations that help plants survive in their environment. Through identifying leaf adaptations students will be able to identify if a plant lives in a rainforest, desert or aquatic environment. Students will complete an art project using leaves as their inspiration. We hope students will leave with an appreciation for plants and art.





#### Essential Vocabulary

Prepare your students for their best learning experience during the Looking at Leaves Program by reviewing these essential vocabulary words.

Term	Definition
Rainforest	Forests with tall trees, warm climates and large amounts of rain. Numerous plants and animals live here. Known as the world's oldest ecosystem.
Desert	Any large region that receives little rain each year. Few plants or animals live here.
Adaptations	Characteristics that help a living thing survive in their environments.
Habitat	An area that a plant or animal makes it home. Habitats provide food, water and shelter.
Emergent Layer	The top layer of the rainforest. Trees can grow up to 200 feet. Sunlight and wind are plentiful.
Canopy Layer	The main layers of the rainforest. Forms a roof over the two bottom layers with a maze of leaves, branches, and vines. Many animals find food here because of the many fruit trees.
Understory Layer	A tangled layer of shrubs and young trees. Plants grow large leaves in the humid and warm environment.
Forest Floor	The bottom layer of the rainforest. It is dark and few plants grow.
Humidity	The amount of water vapor in the air. Humidity increases when water vapor in the air increases.
Leaf Characteristics	Variations in leaf shape, size, texture or color.

**Study vocabulary online at [quizlet.com](https://quizlet.com) teachers can share study sets, track student performance and create assessments. Students can access interactive flashcards, learn pronunciations and play match and quiz games.**



#### Oklahoma Academic Standards

The Looking at Leaves Program achieves the following  
Oklahoma Academic Standards

Grade Level	Standards Achieved
3rd Grade	<p>Science and Art</p> <p><b>Heredity: Inheritance and Variation of Traits (LS3)</b></p> <p>3.LS3.2 Use evidence to support the explanation that traits can be influenced by the environment</p> <p><b>Biological Unity and Diversity (LS4)</b></p> <p>3.LS4.3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.</p> <p>3.VA.P.1.2, 3.VA.P.2.2</p>
4th Grade	<p>Science and Art</p> <p><b>From Molecules to Organisms: Structure and Processes (LS1)</b></p> <p>4.LS.1.1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.</p> <p>4.VA.P.1.2, 4.VA.P.2.2</p>
5th Grade	<p>Art</p> <p>5.VA.P.1.2, 5.VA.P.2.2</p>





**MYRIAD  
BOTANICAL  
GARDENS**

## Looking at Leaves

### Pre-Program Curriculum Resource Guide



**Thank you for choosing the Myriad  
Botanical Gardens for your  
student's field trip experience!**

#### Methods and Models

Through the implementation of research-based methods and models, we strive to provide the most enriching experience possible.

Marzano's Art and Science of Teaching
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Explicit Instruction: Effective and Efficient Teaching
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Instructional Theory Into Practice
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Madeline Hunter Lesson Design
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Bloom's Revised Taxonomy Model
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Maslow's Hierarchy of Needs
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Gardner's Theory of Multiple Intelligences
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STEM/STEAM
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The Science of Classroom Design
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Gradual Release of Responsibility
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## Youth Group Visit Request Form

Please review our Group Programs Frequently Asked Questions and rules before filling out this form. **Please note, this form is only a request form and does not formally schedule the program. Education staff will contact you to formally schedule your program or tour.**

Email your completed form to [education@myriadgardens.org](mailto:education@myriadgardens.org)

1. Group or School Name:
2. Group Billing Address:
3. Tax Exempt Yes or No (if yes, attached proof with your form):
4. Groups are 10 or more participating students. How many students will be attending?
5. Student Age Range:
6. How many accompanying adults (1 chaperone per every 5 students is free)?
7. Group Leader Name:
8. Group Leader Phone Number:
9. Group Leader Email:
10. Are you wanting to book a School Program, Guided Tour or Self-Guided tour (please check one)
  - Taste the Rainforest School Program K-2nd \$7 per student, \$9.50 adult
  - Plant Problem Solvers School Program 1<sup>st</sup>-3<sup>rd</sup> \$7 per student, \$9.50 adult (NEW this year)
  - Kaleidoscope Ecosystems School Program 3<sup>rd</sup>-6<sup>th</sup> \$7 per student, \$9.50 adult
  - Looking at Leaves School Program 3<sup>rd</sup>-5<sup>th</sup> \$7 per student, \$9.50 adult (NEW this year 30 student max\*)
  - Guided Tour \$6 per student, \$9.50 adult
  - Self-Guided Tour (Group Admission) \$4 per student, \$9.50 adult (tax is added unless tax exempt)

**School programs** adhere to Oklahoma Academic Standards and feature an interactive lesson, guided conservatory tour and a scavenger hunt. The program runs from 10:00am to noon and is offered on Monday, Tuesday, Thursday and Friday. Our school programs are designed for grades K-6. A school program is a great choice for a school field trip for grades K-6. [School Programs have a 10 student minimum and an 80 student maximum.](#) [Looking at leaves has a 30 student maximum.](#)

A **Guided Tour** offers your group the opportunity to explore the conservatory with a knowledgeable guide. Tours last 30 minutes to an hour. We offer guided tours on Monday, Tuesday, Thursday and Friday. A guided tour is a great choice for middle school and high school students; however, it can be booked for any grade level. If your group includes students preK-6<sup>th</sup> grade, consider adding **scavenger hunts** to your group's experience. [Guided tours have a 10 student minimum and a 40 student maximum.](#)

**Self-guided tours** offer your group the opportunity to explore the conservatory at your own pace and time. You will not have a guide but booking in advance will allow you our group rate if you have 10 or more students (no max). This is a great choice for groups with numbers over our school group max or groups just wanting a self-guided experience. If your group includes students preK-6<sup>th</sup> grade, consider adding **scavenger hunts** to your group's experience.

**11. If you are booking a tour, would you like to add scavenger hunt booklets 50 cents each, how many:**

Please add three dates below. Please keep in mind School Programs run on a standard time schedule of 10:00 to noon. **If you are booking a tour, please include a preferred time next to your date.** We do not offer School Programs or Guided Tours on Wednesdays or Weekends. We cannot guarantee there will be an opening but offering us three preferred dates will streamline your booking process. We will follow up with you with-in three business days of receiving your request form to confirm a date.

School Programs and Guided Tours are on a first come first serve basis by turning in this booking sheet, and also depend on staff availability. You are always welcome to do a self-guided visit of the Crystal Bridge if our dates do not match.

**12. Preferred Date (dates must be two weeks in advance):**

**13. Your second choice date:**

**14. Your third choice date:**

**15. Do you have any questions or special accommodations you would like to discuss?**

**16. By returning this form and scheduling a visit you agree to our policies:**

I have read and agree to the attached rules document.

I understand payment is due upon arrival and must be paid in **one group total**, physical copies of a school's purchase order is also accepted, you must turn in the actual document.

If you have a large parent presence attending, please inquire about creating a parent group payment (if they will not be included in your school's payment). This will ensure your parents do not have to wait in line to pay individually at the normal rate.

We encourage assigning groups of students to a chaperone before arriving; we suggest a 1 to 5 adult to child ratio as we offer one free adult per every five students in your group. Children should be accompanied and safeguarded by their assigned adult at all times during your group's visit. Myriad Garden's staff will guide the lessons and activities associated with your field trip however we are not supervising or in the care of students during the field trip.

**Please note, this form is only a request form and does not formally schedule the program. Education staff will contact you to formally schedule your program or tour.**

Thank you for your interest in our educational experiences at the Myriad Botanical Gardens! Email your completed form to [education@myriadgardens.org](mailto:education@myriadgardens.org).