



MISSION BOTANICA

EXHIBIT EXPLORATION GUIDE



minotaur mazes

Dear Educator,

Thank you for welcoming the fascinating topics of biodiversity and botany into your classroom!

This activity guide is designed to help educators facilitate exploration of the **Mission Botanica** exhibition in a way that complements classroom curriculum. Activities in this guide are divided into two parts including 1) an anticipatory warm up to engage students before entering the exhibit and 2) suggested tasks to be completed during exploration of the exhibit itself.

Each on-site activity also corresponds with a standards-aligned, classroom-based supporting activity that can be completed before or after visiting **Mission Botanica**, at the discretion of individual educators.

Some key content objectives covered by this exhibition include:

- Plant life cycles
- Structure and function of flowers and leaves
- Plant adaptations
- Environmental and human threats to plants and animals

A note on facilitating your field trip:

Mission Botanica is a hands-on, minds-on, immersive experience with lots of full-body activities as well as question-and-answer challenges.

For best engagement and enjoyment, we recommend:

- Planning these visits to last **45-60 minutes**.
- Preparing students with **expectations** ahead of time.
- Letting students **explore in partners or small groups**, with a chaperone if possible.
- **Keeping hands free** by not requiring students to carry pencils and paper into the exhibit, or ask chaperones to help with this instead.
- **Debrief the experience** after exploration with the suggested discussion questions.
- Completing a **corresponding classroom activity** before or after your visit

As educators ourselves, we know how needs vary from student to student and from class to class. We encourage making adjustments to these lessons and activities and/or adding your own creative flair. We would love to hear what worked for your kids! Send your questions or feedback to: education@minotaurmazes.com.

Again, we appreciate your joining us in exploring the world of botany. You and your students are in for an a-MAZE-ing experience! Enjoy!

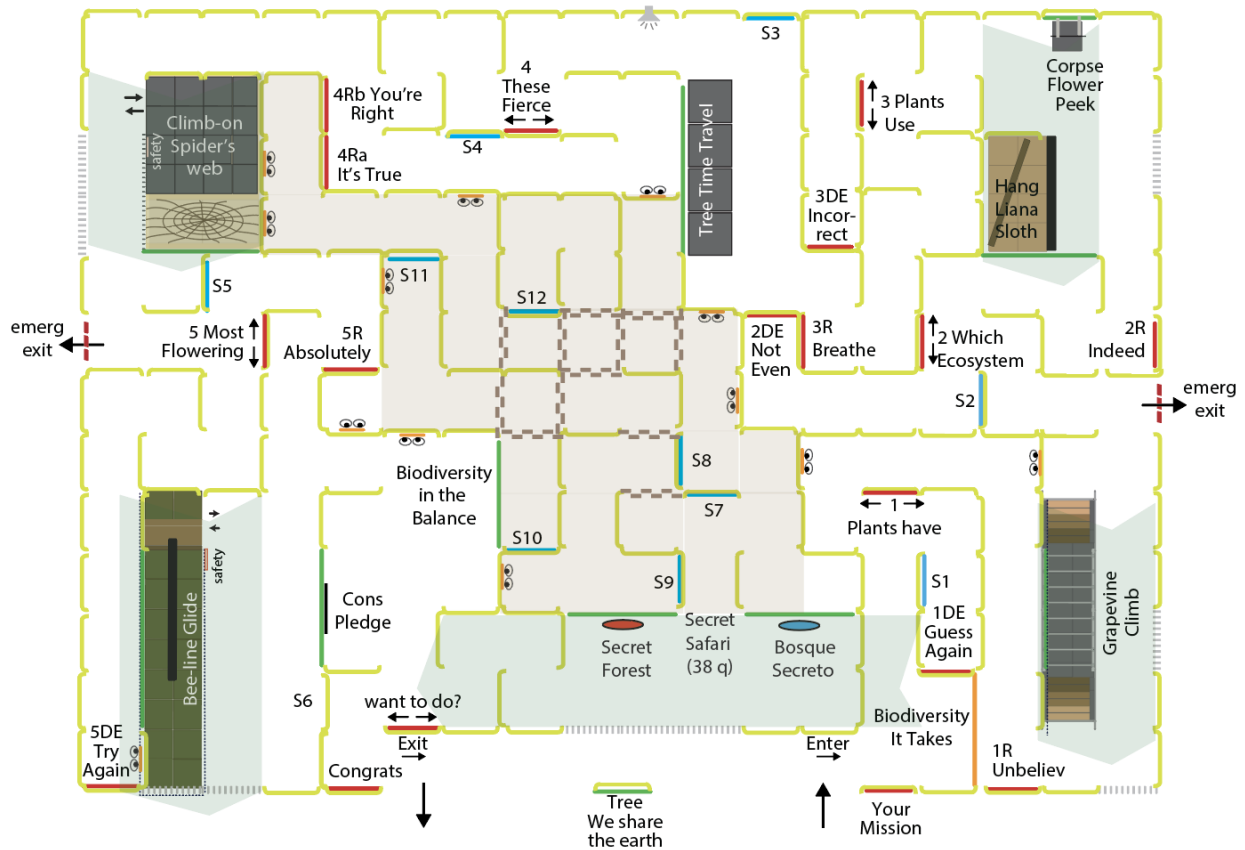
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STANDARD EXHIBIT LAYOUT



Key:

Question & Answer Program: **red lines** labeled Q1, 1DE (dead end), 1R (right answer), etc.

Featured Species Panels: **blue lines** (S1, S2, S3, etc.)

Interactives: **green lines** with descriptive title of interactive component

GENERAL EXHIBIT RULES

- Walk, don't run
- Complete the maze, don't crawl under walls
- Take turns on interactives
- Follow instructions on any posted safety signs
- Only use Emergency Exits in case of emergency

ANNOTATED EXHIBIT COMPONENTS

Question & Answer Program – Test your green thumb with a set of Q&A panels relating to plant diversity adaptations. Dead ends and correct answers reinforce key concepts throughout the journey.

Full body interactives – Gross motor skills activities invite you to use your body to explore the botanical marvels of the world. Activities include climbing from bar to bar to simulate twining like a vine, climbing a spider web to protect your garden, leaping through time across the tree rings of a giant redwood, and gliding a monorail like a buzzing bee transporting pollen.

Photo Op – Hang from a Vine or hold your nose and pose with a Corpse Flower, the world's largest (and smelliest) flower, as you learn about these plants' unique niches in their ecosystems.

Secret Forest Seek-and-Find – Spin the wheel to go on a scavenger hunt through the hidden inner part of the maze. Find the featured species, learn its story, and answer the question from the wheel. Strategically placed peek holes let you glimpse some pollinators from afar.

Featured Plant Species – A dozen target plant species spread around the maze share information about their unique adaptations and importance to humans and their environments.

Biodiversity & You – Highlighting 6 aspects of human life and the important roles that plants play in Food, Medicine, Recreation, Culture, Inventions, and Survival.

Conservation Pledge – Move the checkmarks to indicate your commitment to doing things both inside and outside the home that make a difference for plants and biodiversity as a whole.

1. FROM FLOWERS TO SEEDS: LIFE CYCLE OF A PLANT

Grades: 1st-3rd grade

Content Connection:

Life Science

NGSS.LS1.A: Structure and Function

NGSS.LS1.B: Growth and Development of Organisms

Objective: Students will be able to support their understanding of the life cycle of plants by observing different life cycle stages on the featured plant species inside **Mission Botanica**.

Materials:

- [Before We Stood Tall](#) by Jessica Kulekjian
- Plant Life Cycle Matching activity cards

Key exhibit components:

- Plant species panels

Before Exploring:

- Optional: Read [Before We Stood Tall](#) by Jessica Kulekjian
- Engage the students by asking:
 - What is a seed? What is a fruit?
 - How do seeds and fruit relate, and where do they come from?
 - How does the seed turn into a plant?
- Show a variety of seed types (ideally physical examples, but photos also work). Discuss their shapes, sizes, and colors. Hypothesize how each of these variables helps the seed.
- Repeat this exercise for fruit and emphasize the stages of the plant's life cycle,
- Complete a matching activity by connecting pictures of fruit to the seed/nut of a plant to answer the question: What do the seeds turn into? Debrief by asking students: Is there anything surprising about the matches? Did the biggest seed turn into the biggest plant?

In the Exhibit:

- Some of the target plant graphics show the plant at different stages of its annual life cycle (flower, fruit, nut, etc.). Assign students a target plant to search for while exploring in the maze and try to identify the parts of the life cycle visible in the graphic.
 - American Beech
 - Pawpaw
 - American Chestnut
 - Canada Hemlock
 - Highbush Blueberry
 - American Crabapple
- After exploring the maze, ask students to draw the life cycle of their target plant including the flowers, fruits, nuts/seeds, and overall plant that were visible in the information graphic.

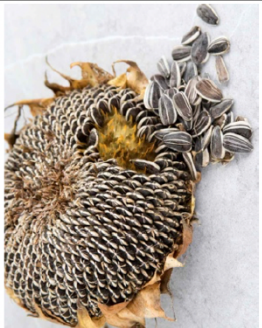
Corresponding Classroom Activities:

The following activities can be completed individually or as a 3-part unit:

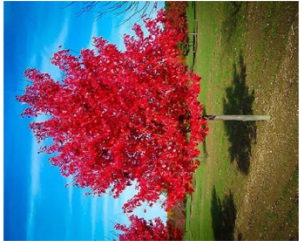
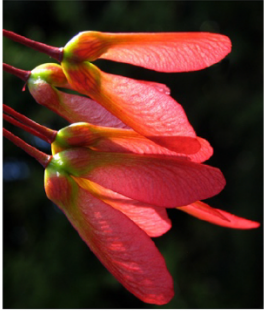
- The Exploratorium's ***Fruit Dissection***: Cut into fruits to discover their shared structures, and how they hint at their past lives as flowers.
 - <https://www.exploratorium.edu/snacks/fruit-dissection>
- The Exploratorium's ***See Inside a Seed***: Examine the baby plants inside the seeds we eat.
 - <https://www.exploratorium.edu/snacks/see-inside-seed>
- The Exploratorium's ***Seed Germinator***: Watch the life of a plant embryo unfold.
 - <https://www.exploratorium.edu/snacks/seed-germinator>

Resources:

Plant Life Cycle Matching Cards

Plant	Flower	Fruit	Seed	Sprout
Sunflower 				
Grape 				
Apple 				

Plant Life Cycle Matching

Plant	Flower	Fruit	Seed	Sprout
Maple 				
Walnut 				
Palm Tree 				

Plant Life Cycle Matching

2. FLOWERS: STRUCTURE & FUNCTION

Grades: 2nd-4th grade

Content Connection:

Life Science

NGSS.LS1.A: Structure and Function

NGSS.LS1.B: Growth and Development of Organisms

NGSS.LS2.A: Interdependent Relationships in Ecosystems

NGSS.LS4.B: Natural Selection

Objective: Students will use the **Mission Botanica** exhibit to enhance understanding of the function of flower adaptations within different environments.

Materials:

- What's Inside a Flower by Rachel Ignotofsky
- Images of different types flowers (listed in Lesson Plan below)

Key exhibit components:

- Featured plant species panels

Before Exploring:

- Flowers are the big idea for this lesson! Flowers can be found on every continent (even Antarctica!)
- For 3rd-5th grade, read - What's Inside a Flower book
 - For older students, omit reading if desired
- After reading, ask students to draw or summarize the purpose of the flower as well as the life cycle of a flower
- Share images of flowers with obvious male and female parts as well as the environments in which they live. Compare/contrast the flower parts and discuss why they might look the way they do. Flowers with obvious male and female parts include:
 - Mallow family (Malvaceae): Hollyhock, Hibiscus, Rose Mallow
 - Buttercup family (Ranunculaceae): Swamp buttercup, Pasque flower, Hepatica
 - Lily family (Liliaceae): Day Lily, Sand Lily, Tiger Lily
 - Nightshade family (Solanaceae): Angel's Trumpet, Okra, Tomato, Eggplant

- Squash family (Cucurbitaceae): Zucchini, Pumpkin, Cucumber, Melon
- Asparagus family (Asparagaceae): Yucca, Artichoke, Bluebells
- Cactuses including: Hedgehog Cactus, Prickly Pear, Ocotillo
- Add to this list with any locally relevant flowers

In the Exhibit:

- Many of the plant species discussed in the exhibit include pictures of the plant's flowers.
- Assign students a target plant. Ask them to find it, draw the flower, and identify any visible parts:
 - Eastern Prickly Pear
 - Royal Catchfly
 - Bloodroot
 - Flame Azalea
 - Spotted Jewelweed
 - Pawpaw
 - Highbush Blueberry (more challenging due to size of flowers in image)
 - American Crabapple (more challenging due to high density of flowers in image)
- After exploration, ask students to share their findings and describe the characteristics of the flower including shape, color, or any descriptions offered in the text on the panel.

Corresponding Classroom Activity:

Flower Structure

- In this lesson, students will dissect and identify parts of the flowers. They will learn about plant anatomy and be able to demonstrate the mechanism of pollination by examining several types of flowers.

Flower Dissection

In this Exploratorium Science Snack, find the sex cells hidden in a bouquet.

<https://www.exploratorium.edu/snacks/flower-dissection>

3. LEAVES: STRUCTURE & FUNCTION

Grades: 2nd-7th grade

Content Connection:

Life Science

NGSS.LS1.A: Structure and Function

NGSS.LS1.B: Growth and Development of Organisms

NGSS.LS1.D: Information Processing

NGSS.LS4.B: Natural Selection

NGSS.LS2.A: Interdependent Relationships in Ecosystems

NGSS.LS2.B: Cycles of Matter and Energy Transfer in Ecosystems

Objective: Students will be able to identify different leaf shapes and functions by exploring the **Mission Botanica** exhibit.

Materials:

- Paper
- Pencils
- Optional: colored pencils or crayons

Key exhibit components:

- Featured plant species panels
- Corpse Flower photo op

Before Exploring:

- Ask students to draw a leaf. If desired, include colored pencils or crayons to add another aspect for discussion. Have students share their drawings with a partner or small group. Then discuss as a class: Are all the drawings the same? What do the drawings have in common?
- Discuss what the job of the leaf is. Answers may include: making food for the plant, providing shade, etc.
 - With older students, extend the discussion to consider some secondary purposes of leaves like medicine, paper products, etc.
- Ask the students to consider: Do all plants have leaves? Do all leaves look alike?

- To highlight some of the discussion results, introduce the following plants featured within the exhibit and discuss their unique leaves:
 - Corpse Flower (has no leaves)
 - Eastern Prickly Pear cactus (leaves are thick, fleshy paddles)
 - Sassafras (4 types of leaves on one plant)
 - Hemlock (evergreen needles act as leaves)

In the exhibit:

- Ask students to pick a target plant by spinning the wheel, then find it in the maze to determine what shape its leaves are.
- After finishing exploration, wrap up with a discussion about the results including possible purposes of each type of leaf.

Corresponding Classroom Activity:

Looking At Leaves

In this lesson, students will investigate and observe different types of leaves. Students will be able to identify important characteristics and structures of leaves and hypothesize about the function and purpose of each component.

4. ANIMAL ALLIES: MUTUAL RELATIONSHIPS

Grades: 2nd-7th grade

Content Connection:

Life Science

NGSS.LS1.A: Structure and Function

NGSS.LS4.B: Natural Selection

NGSS.LS2.A: Interdependent Relationships in Ecosystems

NGSS.LS2.B: Cycles of Matter and Energy Transfer in Ecosystems

Objective: Using the large body interactives and question and answer program of **Mission Botanica** exhibit, students will explore and be able to describe examples of symbiotic mutualisms between plants and animals.

Materials:

- Plant Adaptations: Shallow Roots, Thick Stalks, and Poison by Andi Diehn
- Before the Seed: How Pollen Moves by Susannah Buhrman-Deever, illustrated by Gina Triplett and Matt Curtius
- Paper
- Pencils
- Optional: colored pencils or crayons

Key Exhibit Components:

- Q&A question #4
- Spider Web Climb
- Beeline Glide
- Featured plant species panels

Before Exploring:

- Read excerpts from Plant Adaptations: Shallow Roots, Thick Stalks, and Poison by Andi Diehn and/or Before the Seed: How Pollen Moves by Susannah Buhrman-Deever, to highlight interesting anecdotes about plant-animal mutualisms.
- Explain that plants and animals have developed relationships with each other. Plants need animals and animals need plants.

- Based on the stories and discussion so far, divide students into small groups to act out or illustrate a plant-animal relationship.
- Review by discussing: Why would an animal need a plant? Why would a plant need an animal? How do humans fit into this relationship?

In the exhibit:

- As students explore the exhibition, ask them to pay attention to the activities and panels that highlight any Animal Allies that help plants. The key locations include:
 - Q&A question #4
 - Spider Web Climb
 - Beeline Glide
 - Royal Catchfly species panel
 - Bloodroot species panel
- Debrief the exploration and ask students to reflect on the animal allies they encountered throughout the exhibition. Did anything surprise them about the plant-animal relationships?

Corresponding Classroom Activity:

Let's Pollinate (with Cheetos)

Pollination is a critical plant-animal mutualism. In this lesson, students learn how pollination works by using Cheetos and bee finger puppets to simulate pollen transfer from flower to flower.

5. NICHES: LAYERS OF THE FOREST

Grades: 1st-4th grade

Content Connection:

Life Science

NGSS.LS1.A: Structure and Function

NGSS.LS2.A: Interdependent Relationships in Ecosystems

NGSS.LS2.B: Cycles of Matter and Energy Transfer in Ecosystems

Objective:

Students will use an illustration to model the structure, diversity, and relationships within a temperate forest. Exploration within the exhibit strengthens understanding by highlighting species that form these ecosystems.

Materials:

- Whiteboard or chart paper (optional)
- Layers of the Forest illustration

Key exhibit components:

- Featured plant species panels

Before Exploring:

- As a class, ask students to make a list of the things plants need to survive.
- Explain that some plants need different amounts of each thing to survive. Some do better in full sun, some need shade; some like lots of water, some can survive in the desert; some can grow in nutrient-poor sand while others need rich dark soil.
- These different needs are examples of the niches that plants fill within an environment.
- Explain the concept of an ecological niche at an age appropriate level. Some key components of the term niche are described below:
 - An ecological niche is the specific role, function, and position that a species has in its environment, including how it meets its needs for food, shelter, and survival. In other words: 1) where something lives and 2) how something lives. Specific characteristics of an organism's niche include:
 - **Food sources:** What the organism eats and what eats it.

- **Physical conditions:** Tolerated temperature ranges, moisture levels, and terrain.
 - **Interactions:** How it competes for resources, avoids predators, or partners with other species (like pollination).
 - **Timing of activity:** When it hunts, reproduces, or is active during the day or year.
- Provide students with a Layers of the Forest coloring page. Continue the discussion of niches by illustrating plant niches within a forest.
 - Canopy Layer -
 - Topmost layer formed by the crowns of tall, mature hardwood and conifer trees.
 - Heights reach from 10 to over 30 meters (30 to 100+ feet).
 - Receives direct sunlight and experiences the most wind.
 - Common trees include oak, maple, **beech**, **chestnut**, and birch.
 - Understory Layer -
 - Sits just beneath the main canopy and consists of smaller, immature, or shade-tolerant trees.
 - Heights range from 2 to 15 meters (6 to 50 feet).
 - The environment is calm, dimly lit, and sheltered.
 - Features smaller trees like dogwoods, redbuds, **crabapple**, **pawpaw**, **sassafras**, and saplings.
 - Shrub Layer -
 - Made up of dense, woody bushes and brambles that grow close to the ground.
 - Heights generally stay under 3 meters (10 feet).
 - Thrives where filtered sunlight penetrates the understory.
 - Common plants include **azaleas**, **blueberries**, blackberries, huckleberries, and hazel.
 - Herb Layer (Ground Cover) -
 - Contains soft-stemmed, non-woody herbaceous plants, grasses, ferns, and wildflowers.
 - Plants in this layer often bloom rapidly in early spring before the canopy trees grow their leaves and block the light.
 - Includes shade-tolerant plants like ferns, trillium, bluebells, **bloodroot**, and **jewelweed**.
 - Forest Floor
 - Lowest decomposing layer, covered in leaf litter, fallen branches, fungi, and detritus.

- Home to microbes, insects, earthworms, and fungi that recycle dead matter into nutrient-rich soil.
- Supports non-vascular plants like mosses and lichens growing on rocks, soil, and decaying wood.

In the Exhibit

- Assign partners or groups of students one of the layers of the forest. As students explore the exhibit, ask them to find the following examples of plants from each layer or niche of the forest:
 - Canopy Layer: ***American beech, American chestnut, Canada hemlock***
 - Understory Layer: ***American crabapple, Pawpaw, Sassafras***
 - Shrub Layer: ***Flame azalea, Highbush blueberry***
 - Herb Layer (Ground Cover): ***Bloodroot, Spotted jewelweed***
 - Forest Floor: No examples in this exhibit
 - Note that some plants featured in the exhibit (Eastern Prickly Pear and Royal Catchfly) do not grow in temperate woodlands so they fall outside of the niches described in this lesson.
- After visiting the exhibit, help students check their work and discuss their findings. If possible, ask students to identify other plants or animals that might also occupy the same niches.

Corresponding Classroom Activity:

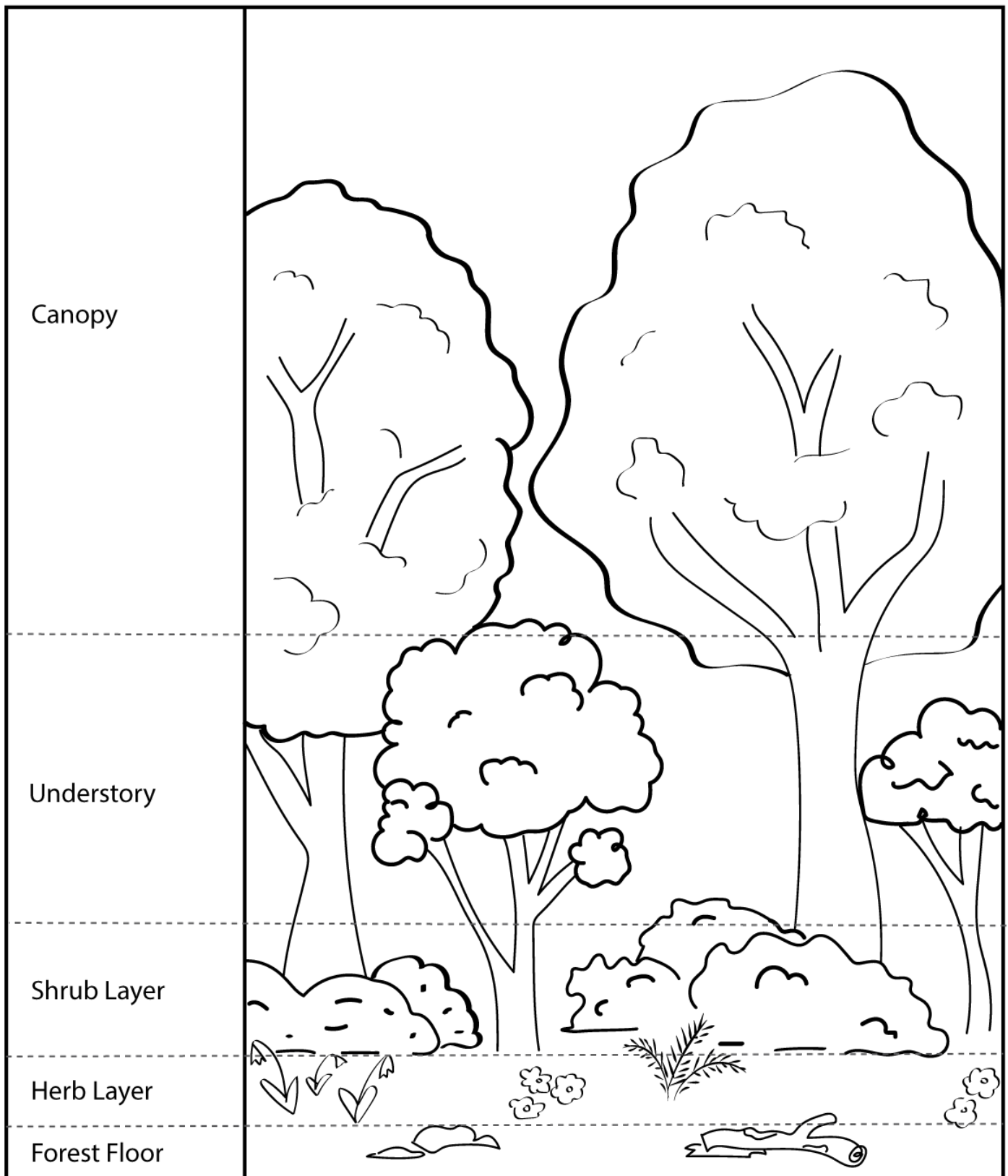
Build a Forest

In this lesson, students will use a KWL chart to collect information from video resources, then create a diorama to demonstrate understanding of the structure of and ecological relationships in forests.

Resources:

Layers of the Forest coloring Page

LAYERS OF THE FOREST



6. PLANT ADAPTATIONS: HOW TO SURVIVE WHEN YOU CAN'T RUN AWAY

Grades: 3rd-5th grade

Content Connection:

Life Science

NGSS.LS4.B: Natural Selection

NGSS.LS4.C: Adaptation

Objective: Students will read about and discuss plant survival adaptations, then complete a Seek and Find challenge to identify specific traits during free exploration of the exhibit.

Materials:

- Plants Fight Back by Lisa J. Amstutz, or Plant Adaptations: Shallow Roots, Thick Stalks, and Poison by Andi Diehn

Key exhibit components:

- Select Featured plant species panels
- Climb Like a Vine interactive

Before Exploring:

- Engage students by asking them to share a favorite animal, then to share a favorite plant. Encourage students to notice that it is probably harder for them to identify a favorite plant.
- Continue the discussion by asking students to compare and contrast animals and plants. For the sake of this activity, the key comparison is that animals can move while plants are literally rooted in place. Have students consider what are some advantages and disadvantages of being able to move versus staying in one place.
- Read: Plants Fight Back by Lisa J. Amstutz, or Plant Adaptations: Shallow Roots, Thick Stalks, and Poison by Andi Diehn
- After reading the story, ask students to provide a definition for the term “adaptation” and share any reactions to the story.

In the Exhibit:

- Assign each student or pair of students one of the following target plants. Their task is to seek out the plant while exploring the maze and learn about its unique adaptations. Do not reveal the adaptation until the wrap up discussion following exploration.

<i>Target Plant</i>	<i>Adaptation</i>
Eastern Prickly Pear	Spines, deter predators
Royal Catchfly	Trichomes, or small hairs, deter predators
Bloodroot	Elaiosomes, or fleshy bodies, encourage ants to relocate their seeds
Flame Azalea	Toxicity, deters predation
Spotted Jewelweed	High velocity seed dispersal, more likely to fling seeds onto suitable ground for growing
Pawpaw	Smelly flowers, attract the right pollinators

- Additionally, if able, students should participate in the Climb Like a Vine interactive. Some plants use tendrils to attach to and move across surfaces.
- After visiting the maze and learning about their target plant, ask students to draw and label their specific plant's adaptations, then infer what advantage each adaptation offers for plant survival.

Corresponding Classroom Activity:

Designer Plants

In this lesson, students will develop their understanding of plant adaptations and survival, then apply this understanding to create an imaginary plant of their own.

7. ECOSYSTEM SERVICES: WHAT NATURE GIVES US

Grades: 2nd-8th

Content Connection:

Life Science

NGSS.LS4.D: Biodiversity and Humans

Earth & Space Science

NGSS.ESS3.A: Natural Resources

Objective: Students will explore human dependence on the environment, specifically on botanical resources, by looking at critical resources provided by plant biodiversity.

Materials:

- For younger students: The Giving Tree by Shel Silverstein or When Dad Cuts Down the Chestnut Tree by Pam Ayres

Key exhibit components:

- **What Biodiversity Gives Us** flip door panel
- Featured plant species panels
- Secret Forest Seek & Find

Before Exploring:

- For younger students, read The Giving Tree or When Dad Cuts Down the Chestnut Tree
 - Omit reading for older students
- Ask students to reflect on some of the things that plants give us. Answers may be limited to food, paper, furniture, and other tangible items, but try to draw out other services.
- As a group, review the text (provided in full below) on the **What Biodiversity Gives Us** panel from the exhibit. After discussing, let students revisit their list and add any additional ideas.
 - **Food** - Chocolate, coffee, and many of our favorite fruits are made possible by a diverse group of animal pollinators, from bats to bees, and beetles to birds.
 - **Medicine** - Plant life not only gives us clues to improve our medicine, the vegetables and fruits we eat provide us with essential vitamins and minerals.

- **Recreation** - If you've ever been on a nature walk or stopped to take a picture of a beautiful flower, you have benefitted from biodiversity.
- **Culture** - Plants can carry strong spiritual and traditional significance and have been central to the identity and lifestyles of cultures around the world for millennia.
- **Inventions** - Many of our everyday materials have been based on plant adaptations – like Velcro modeled after sticky burdock seed pods and water repellent coatings inspired by lotus leaves.
- **Survival** - All life on our planet (including humans) is dependent on the survival of large and small species that maintain the ecosystems we need to survive.

In the Exhibit:

- Ask students to spin the Secret Forest wheel to pick a target plant to search for. After finding it, students should determine what the plant provides humans (and the rest of its ecosystem). Note that it would be easiest to assign plants with tangible commercial uses, but try challenging older or advanced students with some plants that don't have clear tangible uses.
- Tangibles:
 - Food: Prickly Pear, Blueberry, Crabapple, Beech, Sassafras
 - Building Supplies: Beech, Chestnut, Hemlock
 - Medicinal Use: Sassafras, Jewelweed
- Intangibles:
 - Water and soil retention: Catchfly, Prickly Pear, any of the trees
 - Beauty: Azalea, Bloodroot, ALL
 - Oxygen: ALL
- After completing the maze, discuss the results with the students and whether there were any that were surprising or not.

Corresponding Classroom Activity:

What Plants Give Us

Students will complete activities that demonstrate human dependence on plants and will be able to list everyday inventions or materials that are directly related to botanical resources.

8. GOING GREEN: PLANT THREATS & OPPORTUNITIES

Grades: 3rd-8th

Content Connection:

Life Science

NGSS.LS4.D: Biodiversity and Humans

Earth & Space Science

NGSS.ESS3.A: Natural Resources

NGSS.ESS3.C: Human Impacts on Earth Systems

Objective: Students will complete a seek and find challenge to learn more about potential threats to plants. Using this information, students will identify everyday actions to help plants.

Materials:

- What if there were no bees? A book about the grassland ecosystem by Suzanne Slade, illustrated by Carol Schwartz Key

Key exhibit components:

- Featured plant species panels
- Conservation pledge

Before Exploring

- Read: What if there were no bees? A book about the grassland ecosystem
 - Can omit reading for older students
- Explain that most, but not all plants need bees, or other pollinators, to reproduce. Ask students to reflect on what a world without bees would be like. What would happen to plants? And all the things we get from plants?
- As a class, create a short list of other challenges that different types of plants could face. Prompt them with examples if necessary.
- Divide students into partners or small groups to brainstorm ways to address some of these challenges and help protect plants, then discuss as a group.

- The goal of the day is to learn about different types of plants, where they grow, why they are important, and come up with solutions that will ensure they survive and we benefit from all the goods they provide!

In the Exhibit:

- Assign students one of the following target plants to search for in the maze to learn about its unique vulnerability.
 - Royal Catchfly - This prairie plant is threatened by habitat loss. The tallgrass prairie in which they live is widely considered one of the most degraded and endangered major ecosystems on Earth.
 - American Beech - The thin bark is easily scraped and can be marred by humans with sharp sticks or rocks. This allows infection to enter the tree.
 - American Chestnut - A fungal blight killed 99.9% of American Chestnuts. Scientists are working to create a blight resistant hybrid with a Chinese variety of chestnut.
- Before students leave the maze, make sure they take the Conservation Pledge
- After learning about their target plant and taking the Conservation Pledge, gather students to discuss the threats and brainstorm specific solutions for helping their target plant.

Corresponding Classroom Activity:

K-2nd: Tree Stewardship

- Students will develop an understanding of stewardship by exploring the things that trees give and need things from humans and what humans give and need from trees.

3rd-5th: Design a Garden

- Students will use graph paper to map out a garden plot according to the space requirements and bloom times of different plants.

BIBLIOGRAPHY & SELECTED READING

- Before We Stood Tall by Jessica Kulekjian, illustrated by Madeline Kloepper
- What's Inside a Flower by Rachel Ignotofsky
- Plant Adaptations: Shallow Roots, Thick Stalks, and Poison by Andi Diehn
- Before the Seed: How Pollen Moves by Susannah Buhrman-Deever, illustrated by Gina Triplett and Matt Curtius
- Plants Fight Back by Lisa J. Amstutz
- The Giving Tree by Shel Silverstein
- When Dad Cuts Down the Chestnut Tree by Pam Ayres
- What if there were no bees? A book about the grassland ecosystem by Suzanne Slade, illustrated by Carol Schwartz

Additional Suggest Reading:

- Green: The Story of Plant Life by Nicola Davies, illustrated by Emily Sutton
- Pretty Tricky: The sneaky ways plants survive by Etta Kaner, illustrated by Ashley Barron
- Seeds Move by Robin Page