



Buds & Blooms: Beginner Botany

Beginner Botany is our first Buds & Blooms program. From the air we breathe to the clothes we wear, our relationship with plants far exceeds consumption. Let's investigate the many ways we interact with our botanical buddies while exploring the McLane Center's Pollinator Garden. We'll learn how it is that plants create their own food before oftentimes becoming a food source for someone else! A scavenger hunt to put our new botanical knowledge to use will conclude this interactive program.

Lesson Duration: 45-60 minutes	
Objectives: Students will develop a basic understanding of basic botany concepts and a myriad of ways in which plants support our natural environment.	
Introduction: Welcome	3 minutes
Present: Botany 101	5 minutes
Action: Seed to Sapling Yoga (parts of a plant)	5 minutes
Share: Who Needs Plants?	3 minutes
Action: Garden Walk	
Discuss: What did you experience?	
Activity: Flower Dissection	
Present: How do flowers make new flowers?	
Activity: Scavenger Hunt	
Closing	

Assessment: Upon completing this lesson students will be able to:

- Identify the basic parts of a plant;
- Identify the basic needs of a plant;
- Explain why plants are important parts of our ecosystems.

MATERIALS:

- Whiteboard
- Markers



- Plant samples (t-shirt, dollar bill, cork, pencil with rubber eraser, fruit, etc.)
- Animal Cards
- Sun image
- Charged Fan
- Spray bottle with water
- Sample seeds
- Dark construction paper (for plant dissection)
- Sample plants (picked by presenter the day of- lilies work great)
- Plant Parts ID sheet
- Puppet or Plant Parts model

PROGRAM NOTES

Introduction: Warmly welcome attendees. Explain who we are and what we do. Mention funder if applicable. Ask participants to introduce themselves and ask them to share out what their favorite fruit or veggie because those are plants.

Present: Botany 101

Ask the audience the following questions to create conversation. Have props ready to share.

- What is botany? Botany is the study of plants!
- What is a plant? Plants are living organisms that can make their own food!
- What do plants look like?
 - Use a whiteboard to create a plant based on what the participants mention. What do I need? Examples: roots, stem, leaves, branches, flowers, seeds, fruits, etc.
- Why are plants important? (food, erosion control, air, medicine, shelter construction, fiber)
- How do you use plants?

Action: Seed to Sprout Yoga: How do starts start out? What do they need to grow? Show seed examples.

- 1.) Seed on ground
- 2.) Water (spray with bottle)
- 3.) Space (spread out!)
- 4.) Sun (shine the sun over them)
- 5.) Encourage the kids to sprout (germinate)
- 6.) Growing challenges
 - a. High wind (blow the fan)



- b. Hungry animals (rabbit puppet munch munch munch)
 - c. Outcompeted by bigger trees (overshadow them with your tree pose)
- 7.) Grow tall
 - 8.) Reach for the sky
 - 9.) Tree Pose

Discuss: How do animals use plants? Have the attendees popcorn ideas then pass out photos. Have each participant explain how their animal is interacting with the plant.

- Tree cavity for nesting birds and mammals.
- Tall grass provides a safe place for a fawn to nap.
- Twigs and dried grasses create a nest for a clutch of eggs.
- An acorn is a perfect meal for a mouse.
- A strawberry plant produces delicious fruits for a box turtle.
- The bark of a tree creates the perfect backdrop for a tree frog to camouflage and hunt.
- The twig of a shrub is an ideal location for a caterpillar to make their chrysalis.

Action: Let's go see wildlife using plants by taking a stroll through the garden!

Discuss: What did you see? What did you hear? What did you smell?

Activity: Now that we know a little about plants, let's dive deep inside a plant! Plant Dissection (small groups). Try to identify the various parts of a plant using the provided diagram.

Present: How a flower is made. Now that we've discovered the inner workings of a flower, let's talk a little about how a new flower is formed. Use the plant diagrams or a puppet if available to show the transfer of pollen from the stamen to the stigma and down into the ovary where a seed develops.

Scavenger Hunt: Pass out age-appropriate Scavenger Hunts. Work with the youngest group (as it's a story book sensory hunt) and have the bigger kids partner up to explore.

Closing: Regroup to ask about their adventure exploring in the garden. Thank them warmly and if applicable, mention the next upcoming program. Encourage membership as an option for becoming more involved with NHA.