

ACTIVITY WORKBOOK

3-5

TEACHER  
GUIDE

GROWING AT  
The Ringling



# Welcome to the Bayfront Gardens!

The Ringling Museum is known for art and circus collections, but did you know it is also home to lots of gardens? Today you will be going on an adventure to find plants and animals. Use your workbook to learn about different plants in the gardens and to draw the things that you see.

## CONTENTS

- 3 Sketch and Sniff
- 4 Florida Natives
- 6 Pond Life
- 7 Banyan Blast

## CHAPERONES

Please do not allow children to climb on any trees while visiting today. Leaves, sticks, and other plants that have fallen are okay to pick up, but please do not pick anything living off the plants.

This teacher's guide will help chaperones and teachers answer questions about the workbook, and provides lesson suggestions for learning extension in the classroom.

We hope you enjoy your tour today at the Bayfront Grounds and Gardens!

**STANDARDS:** SC.3.L.14.1, SC.3-5.N.1.1, SC.3.N.1.3, SC.4.L.16.1, SC.4.L.17.2, SC.4.L.17.4, SC.5.E.7.2, SC.5.L.14.2, SC.5.L.15.1, VA.3-5.H.3.1, VA.3.S.3.1, VA.4-5.C.3.3, VA.5.F.3.2, VA.5.O.1.2, LAFS.3-5.RI.1.3, LAFS.4.RI.3.7, LAFS.3-5.W.1.2, LAFS.3-5.W.3.8

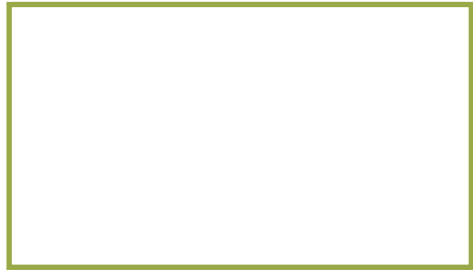
# Sketch and Sniff

**Go to the Rose Garden marked on your map.**

There are a lot of roses in this garden! Walk around and find a rose bush you think looks really interesting. Sit down on the pathway. **Draw** the rose bush paying attention to small details. **Label** the structures of the bush using the word bank below, and describe that structure's role in the plant: food production, reproduction, support, or defense.

WORD BANK

<b>Stem</b>	<b>flower</b>
<b>leaf</b>	<b>petal</b>
<b>roots</b>	<b>bud</b>
<b>vegetative branch</b>	<b>prickle</b>



How many of these plant structures were on your plant?  
Which of the structures did you not see today?

The labels by the rose plant show us the name of the rose, and the date it was created. Over time roses were made to be larger and more colorful, but many lost their smell. Smell a rose that was created before 1940. How does the smell compare to a rose created after 2010?

## CLASSROOM CONNECTIONS

Using the student's drawings as a reminder, review plant structures and discuss how they work together to help the plant thrive. How do we work together like this plant? How does the human body compare to the plant structure?

# Florida Natives

**Go to the Millennium Tree Trail marked on your map.**

There are many types of trees on this trail. Walk around the trail and look carefully at all the trees. **List** three trees that are native to Florida below, do a quick sketch, and make a few notes about their characteristics.

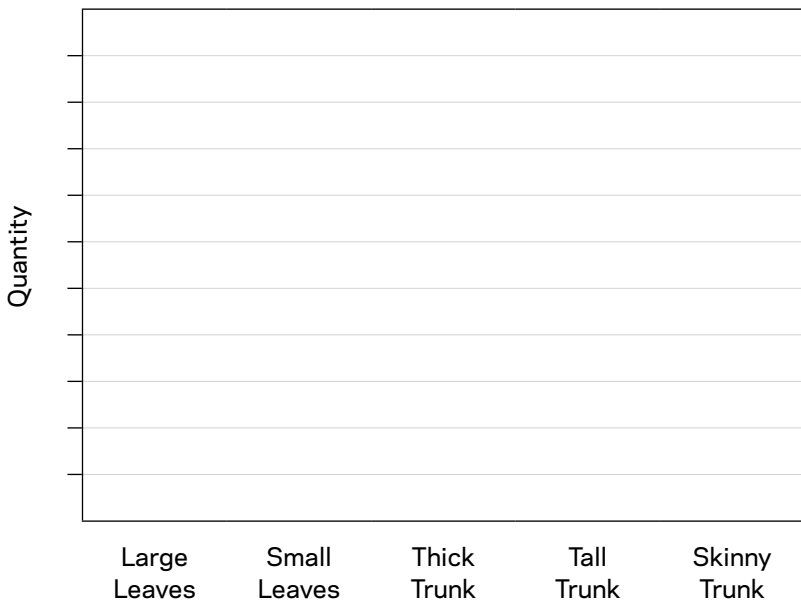
Common Name	Cabbage Palm		
Place of origin	Florida / Cuba		
Describe how it looks	tall with skinny trunk and large fan leaves up top		
Describe or sketch its leaves	Large and fan		
Sketch it!			

Which of your Florida trees was the rarest (had the least) in this garden?

Which of these trees was the most common (had the most)?

Why do you think there were so many of that type of tree?

**Graph your data on a bar graph below.**



### **CLASSROOM CONNECTIONS**

Using a computer, instruct students to research their Florida trees, working together in small groups. Have each group make a line graph representing the Florida trees they chose, and give a short presentation on the characteristics of their trees.

# Pond Life

**Go to the pond as labeled on your map. Examine the wildlife found in this ecosystem.**

Using the space below, **sketch** a view of the pond's ecosystem including animals and plants. **Label** one producer, one consumer, and one decomposer.



What would happen if one of the plants or animals disappeared?

**If one species disappears it will affect the entire food web, harming the ecosystem.**

What would happen if a human moved into this ecosystem?

**Humans disrupt natural ecosystems by over-using resources, scaring species away, and taking space used by other organisms.**

An **ecosystem** is a community of interacting organisms and their environment.

A **producer** creates energy from the sun. A **consumer** creates energy by eating a producer. A **decomposer** creates energy by eating and breaking down dead plants and animals.

## CLASSROOM CONNECTIONS

Have students create a real estate advertisement for an ecosystem. Explain the natural landscape, the neighbors (other organisms in the ecosystem) and a list of desired renter qualities. Using markers, create a poster advertising your ecosystem.

## CHAPERONES

Please keep children 5ft away from the pond's edge at all times. The pond is lined with thick plastic making it difficult to climb out if a child falls in.

# Banyan Blast!

Head over to the Banyan tree near the Playspace marked on your map.

Originally from India, Banyan trees are rare in the United States and are only found in South Florida. Banyan trees play an important role in Indian mythology. Buddha would sit under the Banyan while meditating and teaching, and they remain a common meeting place in India today. Banyan trees are still considered by many to be immortal, or unable to die.

Banyan trees are parasitic, grabbing onto a host tree until their roots are large enough to stand alone. Can you **find** a host tree hidden in the Banyan roots?

An invasive species is a non-native species that takes over an ecosystem. **Describe** some ways the banyan tree is invasive.

**It takes over a host tree and eventually replaces it. It grows over a large area and snuffs out other plants and animals.**

How can we be good stewards of our banyan trees without them taking over the ecosystem?

**We can take care that Banyan trees don't spread by cutting back the roots, and monitoring their growth. We can remove trees that are taking over an ecosystem.**

Banyan trees have long roots that shoot from the canopy down into the ground, making it look like dozens of pillars. How might this structure protect the tree in blistering sun? A hurricane? A flood?

**Its many roots will stabilize the plant, making it able to weather large storms. It requires a lot of water and can selectively pull water from the ground. Its large canopy protects the roots and ground from the sun.**



- 1** Mable's Rose Garden
- 2** Millennium Tree Trail

- 3** Pond
- 4** Banyan Grove

- ★ Entrance
- Restrooms

**HOURS**

All Venues Open Daily 10:00 AM - 5:00 PM  
 Museum of Art & Circus Museum  
 Open Thursdays until 8:00 PM

5401 Bay Shore Road, Sarasota, FL 34243

**941.359.5700 | ringling.org**

# The Ringling

THE JOHN & MABLE RINGLING  
 MUSEUM OF ART

STATE ART MUSEUM OF FLORIDA | FLORIDA STATE UNIVERSITY