





Introduction

Dear Educator,

Welcome! Today you and your group will learn all about leaves and the changes that the fall season brings to Hudson Gardens.

You will find an Activity Guide, map, and all of the tools you will need to complete each activity in your Hudson Explorers Pack. As you read through the Activity Guide, you will notice that educator instructions and prompts are written in **bold italics**. The rest of the text found throughout the Activity Guide is meant for you to read aloud with your students.

Using the Activity Guide and the Map provided in the Activity Pack, you will proceed in sequential order to each of the following five Activity Stations located throughout The Gardens.

Activity Station #1 – Changing Colors, Location: Amphitheater

Activity Station #2 - Falling Leaves, Location: Amphitheater

Activity Station #3 - Leaf Hunt, Location: Pond or Picnic Area

Activity Station #4 - Pumpkin Patch Exploration, Location: Pumpkin Patch

Activity Station #5 – Do You Know the Leaf Man?, Location: Oval Garden

Your journey today will start at the Welcome Garden (the area behind the Gift Shop). You can access the Welcome Garden by entering the Gardens through the wooden gate to the left of the Gift Shop.

♦ Proceed to the Welcome Garden now.

Restrooms are available in this area. Once your group is ready to begin its journey locate Activity Station #1 on your Map.







Activity Station #1 - Changing Colors

Educator Instructions:

♦ Find an open spot anywhere on the large lawn in the Amphitheater area for your group.

Why are Leaves Important?

- Look around at all of the plants growing at Hudson Gardens today. Notice that most of the plants you see have leaves.
- Leaves are important because they make food for plants. The green color in leaves help them soak up sunlight. Leaves use the sunlight along with air and water, to make a special kind of sugar that plants use as food.
- Today you will notice that a lot of leaves are no longer green. What colors do you see?
- Today you will learn why leaves change colors in the fall. You will also discover that leaves come in many different shapes.





Activity Station #1 - Changing Colors

Educator Instructions:

- ♦ Hand out one Sun Bracelet (found in your Hudson Explorers Pack) to each student to put on his/her wrist. The Sun Bracelets have special beads on them.
- ♦ After the Sun Bracelets are on, make sure your group is standing in a very sunny spot. Have your group look at the beads they should be colorful.
- ♦ Now move the group to a nearby shady spot and have the students cover the beads up with their opposite hands. Look at the beads again they should be less bright.

Why Do Leaves Change Color in the Fall?

- Leaves are just like the beads on your bracelet they change in the sun. When there is lots of sun, like in the spring and summer, the leaves are often green and bright because they can make food for the tree.
- In the fall, days get shorter and there is less sunlight for leaves.

 Without enough sun, leaves cannot make food and they start to die.

 The green color starts to fade, and darker colors that were once hidden by the green color show up like gold, red, yellow, and brown.
- The Sun Bracelets are yours to keep; you do not have to give them back at the end of your field trip. When you get home tonight, try different ways to make your beads turn colors.





Activity Station #2 - Falling Leaves

Educator Instructions:

- ♦ Make sure that you are in a spot with a view of many trees.
- ◆ Remove and open the Telescope from your Hudson Explorer Pack to be used during this activity.

Why Do Plants Lose Their Leaves?

- Most plants rest in the winter and need less sunlight and food. When plants need less food, the leaves do not have a job to do and they change color and die. After they are done changing color, wind or rain helps the leaves fall to the ground.
- There are many trees in The Gardens that are losing their leaves. In order to see them, you'll need your Telescope.
- Open your Telescope so that you can see very far. Pass the Telescope around so that everyone has a chance to see the leaves.
- Spot as many trees losing their leaves as you can. Remember that trees losing their leaves usually have leaves that already changed color.
- Do you see any trees with gold leaves? Red leaves? Brown Leaves?
- Can you find trees with any other colors of leaves?
- Can you find any trees with no leaves?





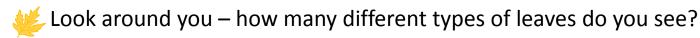


Activity Station #3 – Leaf Hunt

Educator Instructions:

- ♦ Find an open spot anywhere along the Pond or in the Picnic area for your group.
- ♦ Remove the Collection Bag and Leaf Shape Card from your Hudson Explorers Pack.
- ♦ Encourage your group to only collect leaves that have fallen to the ground. Do not pick leaves off of trees or plants.

How Many Types of Leaves Can You Find?



Different types of trees will have different types of leaves. Most leaves come in basic shapes like circles, triangles, ovals, and hearts.

- ♦ Instruct your group to explore the area and collect four different types of leaves (from the ground only). Have your students place their leaves in the Collection Bag.
- ♦ Once your group has collected a variety of leaves, find a place for your group to sit down (you may want to find a picnic table).



Activity Station #3 – Leaf Hunt

How Many Types of Leaves Can You Find?

- Look at the shapes on the Leaf Shape Card. Using the leaves you collected in the Collection Bag, match each leaf to one of the shapes on the Leaf Shape Card and stack the leaves on top of the shape they match.
- When you are done, your Leaf Shape Card should have many leaves stacked on top of each square.
- The shape of a leaf helps us to know what type of plant or tree it came from.
- ♦ Remove the leaves that are stacked on the Leaf Shape Card, and turn the card over. Next to the picture of each shape you will see a list of trees with leaves that match that shape.
- The Leaf Shape Card shows you the leaf shapes of some common trees at Hudson Gardens. Which types of trees did you find the most leaves from?
- Gather all your leaves and return them to the Collection Bag. You will use them one more time in the last activity.







Activity Station #4 – Pumpkin Patch Exploration

Educator Instructions:

- ♦ Please remind your group to only look at, and not pick, the pumpkins in the Pumpkin Patch.
- ♦ Before letting your group explore the Pumpkin Patch, discuss some fun facts about pumpkins, provided below.

What Do You Know About Pumpkins?

Did you know...?

- People used to think that pumpkin seeds could be used to get rid of freckles.
- Pumpkins are fruits, not vegetables! They belong to the gourd family. Some other gourds are squash, zucchini, cucumbers, and watermelons.
- Pumpkins can weigh up to 800 pounds! But most weigh between 8 and 40 pounds.
- Pumpkins were one of the most important foods to Native Americans, who have been growing them for over 9000 years!
- ◆ Explore the Pumpkin Patch with your group. Use the Scavenger Hunt on the next page to guide your exploration. Encourage your students to make general observations about the pumpkins and Pumpkin Patch. For example: How do pumpkins grow? How many pumpkins are growing in the Pumpkin Patch? Are there any signs of wildlife in the Pumpkin Patch? Do the pumpkins smell?



Activity Station #4 – Pumpkin Patch Exploration

Pumpkin Scavenger Hunt

- Pumpkins aren't always orange. How many different colors of pumpkins can you spot? Hint: Look for these four colors: orange, white, green, yellow.
- Pumpkins come in many shapes. How many different shapes can you find?
- Find a plant with small pumpkins growing on a vine. What is the largest number of pumpkins you can see growing on a single vine?
- The ribs of a pumpkin are the "mountains" or bumps that are on the outside of its shell. Find the smallest pumpkin in the patch. How many ribs does it have?
- Find the biggest pumpkin in the patch. How big around is it? Use your hands to measure (see picture to the right).



Once your group has explored the Pumpkin Patch and completed the Scavenger Hunt, have the group gather together at an open spot on the edge of the Pumpkin Patch to discuss their observations.







Activity Station #5 - Do You Know the Leaf Man?

Educator Instructions:

- ♦ Find an open spot anywhere in the Oval Garden area for your group. You may sit on the grass, along the stone walls bordering the gardens, or anywhere else you will be comfortable.
- ♦ Remove the book, <u>Leaf Man</u> by Lois Ehlert, from your Hudson Explorers Pack.
- ♦ Read Leaf Man aloud to your group using the reading guide below.

Reading Guide

Before Reading

- ♦ Show the students the front and back cover of the book.
- ♦ Ask the students if they have ever seen or heard of a leaf man. What do they think a leaf man is?
- ♦ Discuss the different types of leaves that are on the book jacket. Do any of the leaves look familiar? Have you collected any similar leaves today at Hudson Gardens?

While Reading

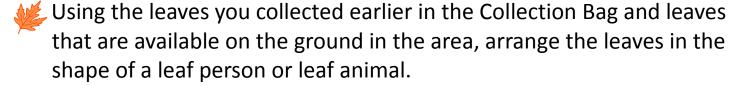
- ♦ Ask the students, as they look at the illustrations, to name the different animals and shapes they see throughout the story. If the students need help visualizing the images, use your finger to trace the shapes and point out features (e.g., mouth, eyes, etc.)
- ♦ Have the students predict where Leaf Man will go next.
- ♦ Once you have finished reading Leaf Man, it is time for each person in your group to create their own leaf characters. This activity can also be done as a group by creating a single leaf character.





Activity Station #5 - Do You Know the Leaf Man?

Create Your Own Leaf Man!



- Once you've created your leaf characters, give them names, and take a photo to send to Hudson Gardens.
- Leave your Leaf Man characters at Hudson Gardens for others to enjoy and remember....

A Leaf Man's got to go where the wind blows.

Congratulations! You have completed Leaf Lookout!

- Remember everything you learned today about leaves and pumpkins! Feel free to enjoy our straw bale maze near the Pumpkin Patch and to continue exploring Hudson Gardens.
- ♦ If you would like to submit a photo of your Leaf Man character to the Hudson Gardens Gallery, please send it to education@hudsongardens.org. Please include your visit date, school name, teacher's name, and the name of your leaf character in your email.
- ◆ Each week during the months of September and October we will feature one group's Leaf Man character on our website and Facebook page. Your Leaf Man could be next!



Thanks for visiting and come see us again soon!