

Plants Make Sense!



BOOK 1:

Grades

K-1

**Lead-Along Copy for Teachers
and Chaperones**

Welcome to San Diego Botanic Garden!

Your presence is an essential part of our mission to inspire and empower our community.

Plants Make Sense is a manual for slowing down and using your curiosity (and the five senses) to explore the wonderful world of plants.

Use this Lead-Along copy to guide group discussions, dive into classroom connections, and channel group excitement into thoughtful observations. Lead students chronologically through their booklets, or use the resource organically as you explore!

Thank you for growing with us!

SDBG's collection includes natives and plants from around the globe, including many rare and endangered species.

Please remind students to stay on the pedestrian paths and be Plant Protectors by moving carefully and keeping their hands to themselves.

Activities

- Senses Scavenger Hunt & Sense to Structure Matching Game
- Mindfulness Exercise #1 (Smell)
- Happy Plants Matching Game
- Field Notes
- Critter Tracker
- Mindfulness Exercise #2 (Hear)
- Plant Powers
- Draw-bservations
- At SDBG...
- Botanic Explorer Notes
- Post-visit survey

Student Book, Pg 3

Prompt the students to write their names, today's date, and circle a choice for Today's Weather.

WELCOME, EXPLORER!

Name: _____

Date: _____

Today's weather: *(Circle one)*

Investigating Ideas:

Invite students to talk about weather patterns in San Diego together. Use the following examples to help guide the investigation:

- What is the weather like in San Diego in the winter?
How about in the summer?
- Do you like the weather in San Diego?
- Does the weather ever change your plans or your mood?
- Do weather events like rain or snow happen in San Diego?
When do they happen?

Unlocking Concepts *(Optional)*:

Introduce the word for what you're discussing (weather patterns in a certain place over time): Climate.

Building Wisdom *(Optional)*:

- Share that San Diego has a Mediterranean Climate!
- This means that we have hot, dry summers and cooler, wet winters.
- Only five other regions in the world share this type of climate!
However, lots of plants from all over the world grow happily in a Mediterranean climate.

Concept Words: Climate; Weather.

SENSES ACTIVITIES & MINDFULNESS PAUSES

Senses Scavenger Hunt (Student Book, Pg 4–5)

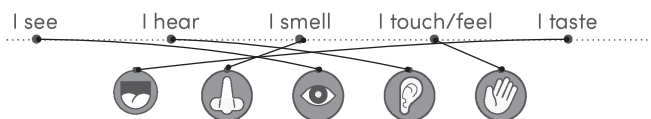
For their safety, please remind students **not** to touch the plants.

Investigating Ideas: Help students hunt for sights, sounds, smells, and sensations while you explore the Garden! Here's a guiding question:

What sense(s) helped you make that observation?

Unlocking Concepts (Optional): Review how many items students found and which senses were used.

Building Wisdom (Optional): Use Page 5 to guide students to match their senses to the correct body part.



Mindfulness Moments: Smell & Hear

Read-Aloud: Being “mindful” means slowing down and focusing on your body and senses. The Garden is a perfect place to practice.

Use these prompts to make the moment:

- “Close your eyes.”
- “Be calm and still like the plants around you.”
- “Focus on one sense (take a deep inhale, or listen carefully) for ~ one minute.”
- After, take turns sharing one thing they sensed and how it made them feel.

Mindfulness Moment #1: Smell (Student Book, Pg 6)

Plant Spotlight: Smelly Superheroes!

White Sage’s leaves have fuzzy hairs that hold minty-smelling oils inside.

Skunk Plant is also stinky to mammals like dogs and cats.

Jasmine flowers smell strongest at night so that pollinators like moths and bats can find them.

Mindfulness Moment #2: Hear (Student Book, Pg 10)

Plant Spotlight: Bamboo!

- SDBG is home to over 100 different species of bamboo.
- Bamboo holds the Guinness World Record for fastest growing land plant.
- SDBG has worked with the San Diego Zoo to provide yummy bamboo for their Giant Panda Conservation program – pandas can be picky eaters!

Concept Words: Sense; Plant; Environment

DRAWING & RECORDING OBSERVATIONS

Field Notes (Student Book, Pgs 8–9)

Investigating Ideas: Students can choose a plant to draw, or draw the same plant together as a group!

Unlocking Concepts (Optional): Use the word bank to help your students label the different parts of the plant they’ve drawn.

Word Bank: Leaf; Roots; Stem; Flower; Fruit

Building Wisdom (Optional): Share the name for what you all have just done: Data Collection! → Data is another word for “information”.

Critter Count (Student Book, Pg 9)

Plants aren’t the only living things in the Garden! Plants are important neighbors and habitats (or homes) for animals.

Investigating Ideas: Help students practice their tally marks to keep track of the animals they observe!

Unlocking Concepts (Optional): Look for evidence of plant/animal relationships, like:

- Animals eating plants (i.e. a bird drinking from a flower or bite marks on a leaf).
- Animals using plants as shelter or shade.

Building Wisdom (Optional): How can animal/plant relationships help both parties? Here’s a thought experiment:

Squirrels bury nuts and seeds to keep their food safe. What do you think happens to the seeds that squirrels forget about?

Draw-bservations (Student Book, Pg 12 & 13)

Investigating Ideas: Prompt students to pick a plant or a landscape that stimulates their senses – and imagination!

Unlocking Concepts: Discuss: Why are these plants here?

Building Wisdom: An important job of a botanic garden is to protect plants. The word for this important action is: Conservation! This can look like...

- Botanic gardens caring for plants that are endangered, or struggling to survive in the wild.
- Communities cleaning up trash and pollution to keep the environment healthy.
- Think of other examples together!

Concept Words: Sense; Plant; Animal; Conservation; Impact

SENSES ACTIVITIES & MINDFULNESS PAUSES

Happy Plants (Student Book, Pg 7)

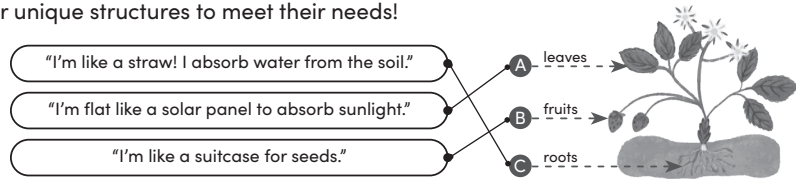
Investigating Ideas: Invite students to share what they know about plants.

Guiding questions:

- Where do plants come from?
- What do plants need to survive?
- What are the reasons why plants are important to our world?

Examples: Plants are food for animals and people; they purify our air and water; used for shelter, clothing, and tools; and more!

Unlocking Concepts (Optional): Use the matching game to explore how plants use their unique structures to meet their needs!



Building Wisdom (Optional): All plants are unique! A plant's likes or dislikes reflect its home, or "native environment". For example:

- Rainforest plants like humidity, or moisture in the air.
- Desert plants like lots of sun and don't need much water.



Plant Powers (Student Book, Pg 11)

Just like us, plants use parts of their bodies to sense and change their environment.

Investigating Ideas: Help students find evidence, such as:

Growing toward the light

Closing flowers on a cloudy day

Tree roots cracking the sidewalk

Unlocking Concepts (Optional): Invite students to dig deeper with questions like...

- Why do you think the plant is doing that?
- What else is happening around the plant?

Building Wisdom (Optional): Use these guiding questions for a group discussion:

- Like plants, people have survival needs. What are they?
The main ones are air, water, food, and shelter.
- How about other important needs like community and safety?
- What are some ways plants help us meet those needs?
- What could happen if too many plants are taken by humans for food or other uses?

Concept Words: Plant; Lifecycle; Survival; Environment; Impact

WRAP-UP & POST VISIT



(Student Book, Pg 14)

While you wait to depart or back in the classroom:



Please complete our Chaperone survey to share more about your experience!

Students can use the prompts on Pg 14 of the Student Booklet to share their favorite parts about your visit.

Botanic Explorer Notes (Student Book, Pg 15)

This is a free space to draw, journal, and more!

Recommended Reading (for Fun!)

The Panda Who Would Not Eat, by Ruth Todd Evans

A Fruit is a Suitcase for Seeds, by Jean Richards

Plants Can't Sit Still, by Rebecca E. Hirsch



Chaperones! Use this code to take a survey and tell us about your experience today.

Concept Words

Sense: Our body's built-in tools for receiving information about the world around us. Humans have five main senses (sight, smell, hearing, touch, and taste.)

Weather: The combination of sunlight, wind, snow or rain, and temperature in a particular place at a particular time.

Climate: Weather patterns in a particular place over a long period of time (years, decades, or even longer).

Environment: Everything around us, including nonliving things (land, air, water) and living things (plants and animals).

The place where plants and animals live and get what they need to survive.

Survival: The ways that living things (plants and animals) meet their basic needs (water, air, food, shelter) in their environment.

The use of external parts and specific behaviors to grow and meet needs.

Energy: The ability to make things move, happen, or change. For example, objects in motion (like a rolling ball or flowing water) have energy. Energy helps people to move, plants to grow, and so much more!

Plant: Living things that need water and light to survive and grow. Plants have special parts (roots, stems, leaves, flowers) that help them meet their needs.

Animal: Living things that need food, water, and air to survive. Animals also have special body parts that help them meet their needs, like beaks or claws. Unlike plants, animals need food to survive and usually eat plants or other animals.

Conservation: Protecting things found in nature, like plants, animals, and their environments.

Impact: A strong effect.

Lifecycle: The stages that a living thing goes through from birth to death.

Concept Words

- Weather
- Climate
- Environment
- Sense
- Survival
- Energy
- Plant
- Animal
- Conservation
- Impact
- Lifecycle

Plant concepts

- What is a plant?
- What do plants need to survive?
- How do plants sense the world (environment) around them?
- How can plants change the world (environment) around them?

