Welcome to the Smith Botanic Garden!

A Fun Student Guide to the Lyman Conservatory
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All you need to use this guide is a pencil, your eyes, and the energy to explore!

www.smith.edu/garden
www.smith.edu/garden/kidscorner
What exactly is a Botanic Garden?

A botanic garden is like a museum—except that the displays are living plants! Our botanic garden grows plants so that people can learn through observation, study, and research.

So where's the garden?

The whole Smith College campus! The trees are labeled and recorded, making the campus an arboretum. There are also several gardens around campus, such as the Rock Garden outside Lyman Conservatory. The Lyman Conservatory contains over 3,000 different plants... Can you guess why we keep some plants in greenhouses?
Why are Plants Important?

All of our food comes from plants. Plants produce their own food using light energy from the sun, carbon dioxide from the air, and water and nutrients from the soil. This process is called photosynthesis, which also produces oxygen for us to breathe.

Animals get their energy by consuming plants and/or other animals.

What did you eat today? Have you eaten any plants?

Breakfast: __________________________________________

Lunch: ___________________________________________
Use your observational skills to explore the different green houses!

Pay attention to differences in:
- Temperature
- Humidity
- Smells
- Colors
- Sizes, Shapes, and Textures of the plants!
Smith Botanic Garden Scavenger Hunt

There are so many exciting plants to see here. This Scavenger Hunt will take you from greenhouse to greenhouse and help you find some of the most interesting plants. Good Luck!

**Succulent House**
Find a plant that:
___ has only two leaves
___ looks like a turtle shell
___ looks like a rock
___ has hair

**Show House**
Find a plant that:
___ has soft, fuzzy leaves
___ might be used for cooking
___ has fruit
___ looks familiar to you

**Fern House**
Find a fern that:
___ looks like a tree
___ is not growing in soil
___ grows like a vine

**Palm House**
Find a plant that:
___ has leaves with holes
___ has roots above ground
___ you can eat

**Stove House**
Find a plant that:
___ has floating leaves
___ has long, visible roots
___ looks like a long beard
___ captures and digests insects
___ looks familiar to you

**Warm Temperate House**
Find a plant that:
___ has fruit
___ has unusual leaf patterns
___ grows in water
___ has spines
___ is a common house plant

**Cool Temperate House**
Find a plant that:
___ has spotted leaves
___ has a mossy trunk
___ has furry leaves
___ has furry flowers
Welcome to the desert! Why might you need these things in the desert?

Plants that live in hot, dry environments need some of the same things you would to survive: water and protection from the sun and animals.

Can you find the living stones?
They use camouflage to avoid being eaten.

These are some of the traits plants use to survive. Can you find some plants that have these traits?

- Thorns and Spikes
- Few or No Leaves
- Small Hairs
- Camouflage
- Deep roots
- Storing Water
- Any others?

What do you think this hairy cactus is protecting itself from?
Do you notice that it smells different in this room?
That’s because this is the fragrance room!

Do you recognize any of the plants in this room?
Write down their names:
______________________
______________________
______________________
______________________
______________________

Draw a plant that you think smells nice.

Why do you think plants have scents?
Fern House

Ferns are some of Earth’s oldest plants—older than flowering plants and even dinosaurs!

What colors do you see in this room?

Do you see any flowers?

The leaves of ferns are called **fronds**. Ferns don’t have flowers; instead they use **spores** to reproduce, which are contained in the spore cases on the undersides of the fronds.

Turn over a fern frond—do you see any spore cases on the fronds?

Draw a picture of a fern frond. Sketch some spore cases on it too!
This greenhouse is often called the Jungle Room—can you tell why?

What change do you notice in:
- Temperature?
- Humidity?
- Light Level?
- The Size of the Plants?

Many of the plants in this room are found in rainforests, where it can rain as much as 80 - 250 inches a year (It rains about 45in./year here in Northampton).

Find some plants that humans use:
- Cacao
- Cinnamon
- Banana
- Bamboo
- Rubber
- Others

_____________  _______________
_____________  _______________
Do you see any plants you recognize? Look closely!

Can you find the plants in this room that are used by humans?
- Papyrus
- Pineapple
- Sugarcane
- Vanilla
- Anything else?
- __________________
- __________________
- __________________
- __________________

Many bromeliads and orchids are epiphytic—some people call them “air plants,” because they can grow without soil. Notice the orchids’ long roots.

Pitcher Plants are carnivorous! They have developed modified leaves that trap and digest insects, providing the plants with extra nutrients.

Draw the plant that you find most interesting!
Warm Temperate

Many of these plants are common house plants, grown for ornamental reasons. Do any of the plants in this house look familiar?

Notice the different shapes, sizes, and colors of the leaves.

Draw your favorite leaves.

Besides looking pretty, are there any plants in this room that humans use?
Hint: Your clothes may be made of it!
This room is divided up by geographic region—the 4 corners of the globe!

Do you notice the cool temperature? Plants in this greenhouse can’t survive really cold temperatures, but they don’t need to be really hot either. Do you notice the humidity level?

Do you recognize any of the plants in this room?

Can you find these plants? Where are they from?

- Olive: ________________________________
- Fig: ________________________________
- Coffee: ______________________________
- Tea: ________________________________

Olive: ____________________________
Fig: _____________________________
Coffee: __________________________
Tea: _____________________________