

YOUR MISSION
LEARN FROM NATURE

MISSION ACCOMPLISHED

After you are done exploring, take your completed mission back to The Shop and share your work with the Expedition Discovery Volunteer to claim your pin!

Date of Exploration: _____

Time of Exploration:_____



Your Mission, Should You Choose to Accept it:
LEARN FROM NATURE

Explorers, have you ever watched a lizard climb up a wall? Their feet aren’t sticky like glue or tape, they actually have tiny hairs on the bottom of their feet that lets them stick to walls. We can’t just borrow their feet to help us climb upside down, but we can study them and learn more!

READY EXPLORERS, LET’S GO!

Today, you are going to learn from nature, and look at how colors and textures can help plants and animals solve problems!

1. **Use your map and explorer skills to locate the Madagascar Spiny Desert** (#31 on your map).

- Look at the plants in this area. What are three colors that you see?

1. _____

2. _____

3. _____

- Lots of these plants are LIGHT colors. Do you know why?

- **AT HOME:** If you don’t know the answer, here is something you can try at home to help you figure it out. Put a piece of white paper and a piece of black paper in a sunny spot. Wait 15 minutes. Which piece of paper is warmer when you touch them?

- Explore the spiny desert and find your favorite plant. sketch below!

Would you want to hug these plants? Why not? Why do you think that these plants have so many sharp edges and spines?

2. **Find #32 on your map** and go to the Sibley *Victoria amazonica* pool , OR the Fountain court Pool with the blue glass sculptures located by the South Gate, at the north side of #13.

- How many different kinds of plants can you find living in the water?
- What shape(s) do you notice? Do you think that this shape is helping the plant survive in the water? Sketch the shape below.

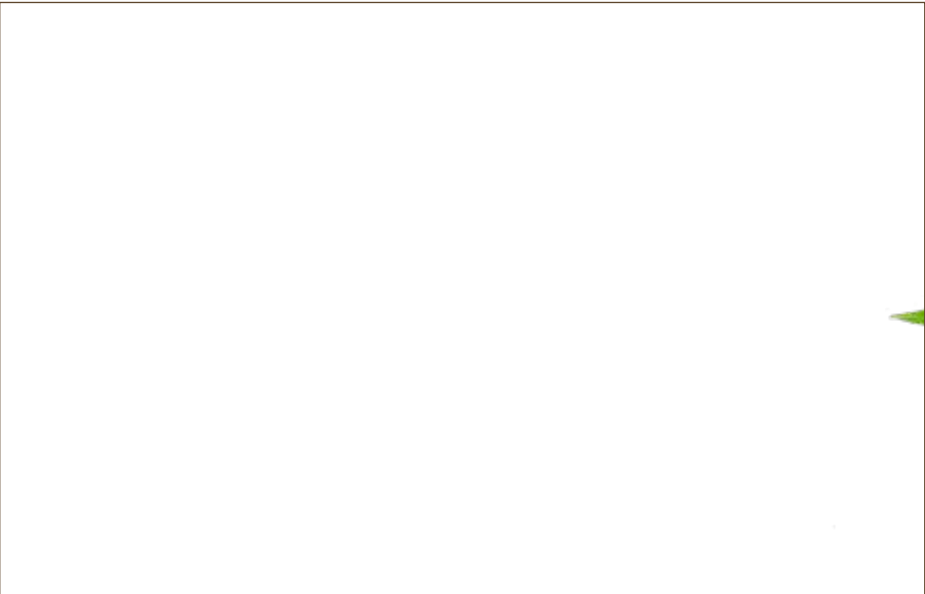
- Do you see any water on the leaves floating in the water? What happens if you splash some water (gently!) onto the leaf? Take a picture or video of what happens



3. Find the Wings of the Tropics Butterfly Conservatory (#24 on your map).

- As you walk through the Wings of the Tropics, try to spot a Blue Morpho butterfly. Hint: These butterflies are often on the path, at the fruit feeding stations, or flying around.
- They have a bright blue color on the inside of their wings, and brown and white spots on the outside of their wings, that look like eyes. How many spots do you see?

- These eyespots, provide camouflage against predators such as birds and insects when its wings are closed
- Draw a blue morpho hiding from a predator



4. All Great explorers record their adventures

- What was the most interesting thing you saw today?
- What is one thing you learned today?
- What do you want to explore on your next visit?

If you’re interested in learning more, or seeing real-life examples of inventions inspired by nature, visit biomimicry.org



Buildings, Exhibits and Collections

- | | | |
|--|---|--|
| 1 Jean Ellen Shehan Visitor Center, The Shop & American Orchid Society Library | 12 Learning Garden | 24 Wings of the Tropics Butterfly Exhibit at The Clinton Family Conservatory |
| 2 Geiger Family Tropical Flower Garden | 13 Nell Montgomery Garden House | 25 Glasshouse Café |
| 3 Adam R. Rose & Peter R. McQuillan Arts Center | 14 Garden House Lawn | 26 Paul and Swanee DiMare Science Village |
| 4 Richard E. Danielson Vine Pergola | 15 Liberty Hyde Bailey Palm Glade | 27 Dr. Jane Hsiao Laboratories: Microscopy Lab, Dr. Raymond Baddour DNA Lab; The Million Orchid Project Lab; Vollmer Metamorphosis Lab |
| 5 Sibley Victoria amazonica Pool | 16 Rainforest Rock Garden | 28 Joyce and M. Anthony Burns Science Building |
| 6 Tropical Flowering Tree Arboretum | 17 Cycad Circle | 29 Richard H. Simons Rainforest, Cloud Forest & National Orchid Garden |
| 7 Lin Loughheed Spiny Forest of Madagascar | 18 Moos Sunken Garden | 30 NASA Innovation Studio |
| 8 The Gatehouse | 19 Col. Robert Montgomery Palmetum | 31 Garden Club of America Amphitheater & Loughheed Palm Grove |
| 9 Allée & Overlook Vista | 20 The Bruce and Martha Clinton Children’s Education Building | |
| 10 Corbin Education Building | 21 The Martha O. Clinton Children’s Garden | |
| 11 Lisa D. Anness South Florida Butterfly Garde | 22 Angie and Bill Whitman Tropical Fruit Pavilion | |
| | 23 Tropical Plant Conservatory & Rare Plant House | |