

## Ways to Learn, Explore and Play Inspired by Nature



Do physical exercises inspired by animal movements. Hop like a frog, flap your arms as fast as a hummingbird, slither like a millipede, and more.

Make a mystery box by cutting a hand-sized hole in the side of a shoebox. Place objects inside the mystery box to explore them with your sense of touch – no peeking!

Research biomimicry, where people take engineering inspiration from things in nature.

Create a pinhole projector to look at the sun safely. Seal it and use photo paper to make a DIY camera.

Make mobiles out of natural objects you find. Use sticks or bamboo to hang objects like flowers, twigs, and pine cones from.

Create a map of an outdoor area. Map the terrain, your route, or beyond!

Explore which natural objects are water repellent, and which aren't. (Hint: aquatic plants like lotus leaves have great water repellency.) Why do you think that is?

Measure things in nature! Use standard or nonstandard measurements. Use math to calculate their area, or things you can't measure directly (like the height of very tall trees).

Look for different shades of red and write a short poem about what you see.

Find two leaves and describe how they are similar and how they are different.

Some flowers have bright colors or markings on their petals, while others do not. If you were to design a flower, how would it look? What would you name it?

Quietly, stand in the garden and close your eyes. What do you hear? What do you smell? Do you feel anything on your skin? How do you feel inside your body?

Look all around you. Can you find evidence of an animal's home? Who do you think lives there?

Note the characteristics of a plant or animal in the garden. Describe how it might look in a different season of the year.

If you were a plant, how would you adapt to being eaten by insects or animals in the garden?

Make pretend binoculars with your hands and focus on a plant in the garden. Use your body to make a shape you see.

What do you think would happen if you planted a tulip bulb upside down?

Can you observe something right now that you have never seen before? If so, what is it?

Look around you. If you could add something in this area to the garden, what would it be?

Pretend to be a seed waking up and becoming a plant. Act out the motions.

If you were a raindrop falling from the sky, what path would you take through the garden?

Close your eyes and listen to the sounds of nature. Describe the sounds that you hear and try to identify what animals are making the sounds. Draw a map of where the sounds are located around you.

Describe the plants in this area of the garden. Are they similar or different to other parts of the garden?

Can you find a plant that could be useful to you? How would you do this? What part of the plant would you use?

Choose a plant or animal in Duke Gardens to observe. Make a list of questions that you would like answered about that plant or animal.

Go to a spot that interests you. Observe the nature in this area closely and describe it as if you were designing a travel brochure to bring others to your spot.

Search the area to find the largest plant and the smallest plant. Examine each one closely and make a list of your observations for each. Compare your lists and note what is different? What is the same?

Find something outdoors to observe. Pretend that you are a scientist and describe it using numbers and measurements. Then pretend you are a writer and describe it using adjectives.

Find an area that you consider to be beautiful. Then sketch a small part of this scene without looking at your paper and pencil. How did this method help you to observe more detail?