

**Beautiful
Biomes**

*presented with
Smithsonian Gardens*

*Recommended for
Ages 5-10
Kindergarten – Grade 5*

A Reproducible Learning Guide for Educators

This guide is designed to help educators prepare for, enjoy, and discuss **Beautiful Biomes**. It contains background, discussion questions and activities appropriate for ages 5-10.

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About the Program



Home sweet biome? A biome is a unique environment that nurtures plants and creatures suited for that special climate, such as tundra, desert, rainforest, grassland, and ocean. Celebrate Earth Month with Smithsonian Gardens and discover how all living things—including the earth itself—are connected by adaptation to the beautiful biomes we call home.

About Smithsonian Gardens

Their Mission: **ENGAGE. INFORM. INSPIRE.** As a vital and vibrant part of the Smithsonian experience, we engage, people with plants and gardens, inform on the roles both play in our cultural and natural worlds, and inspire appreciation and stewardship. Established in 1972 to manage the museum grounds, Smithsonian Gardens extends the Smithsonian’s museum experience in a public garden setting, inspiring visitors with exceptional displays and educating them about horticulture, plants, the natural and built environments, and artistic design.

For more information visit: <http://www.gardens.si.edu/>



What is a Biome?



A biome is an area of the planet that can be classified according to the plants and animals that live in it. Temperature, soil, and the amount of light and water help determine what life exists in a biome. Not all scientists classify biomes in the same way. Some use broad classifications and count as few as six biomes. These are forest, grassland, freshwater, marine, desert, and tundra. Other scientists use classifications that are more precise and list dozens of different

biomes. For example, they consider different kinds of forests to be different biomes.

For more information visit: <https://www.nationalgeographic.org/encyclopedia/biome/>

Ecosystems

Each individual plant and animal could not exist by itself on planet Earth. All living organisms need millions of other living organisms to survive. How these organisms interact with the sun, soil, water, air and each other in a specific area is called an ecosystem. An ecosystem describes a specific area where the organisms work together as a unit. It could be any size from a tiny pool of water to hundreds of square miles of desert. Each ecosystem is different and each has established a balance over time that is important to every form of life within the ecosystem. A biome is a collection of similar ecosystems.

Learn more at: www.ducksters.com/science/ecosystems/world_biomes.php

What are the different Biomes?

Aquatic Biomes

- Freshwater
- Freshwater wetlands
- Marine
- Coral reef
- Estuaries



Terrestrial Biomes

- Tundra
- Rainforest
- Savanna
- Taiga
- Temperate forest
- Alpine
- Chaparral
- Desert
- Temperate grasslands



Vocabulary

Adaptation- the process of adapting to environmental conditions

Atmosphere- layer of gases, like air, that surrounds the Earth.

Biodiversity- variety of life

Climate- Weather in an area over a long period of time.

Habitat- place where living things reside.

Pollution- release of harmful materials into Environment

TRY IT AT HOME

Create Your Name Out of Nature!

Materials:

- Cardstock
- Glue
- Nature items
- Brown paper bag

Directions:

- Grab your brown paper bag to collect items.
- Go out in nature (your backyard, a park, campground, the beach, anywhere!) and find things that you can use to create the letters of your name: sticks, rocks, leaves, grass, pine-needles, flowers, berries, plants, shells, clovers, bark, dirt, sand, etc.....
- On a piece of cardstock, write your name (or have it prewritten).
- Use glue to get your nature items to stick to each letter to spell your name!



More information can be found at: www.littlefamilyfun.com/2012/05/nature-names-craft.html

Create a Flower Panel!

Materials:

- Cardboard
- Clear plastic wrap
- Nature items
- Glue

Directions:

- cut frames from old cardboard boxes; use a cutter or scissors
- cover with plastic wrap that side of the frame that will be the back of the frame as shown on the image; fasten with scotch tape
- arrange the flowers
- cover once again with plastic wrap; use scotch tape to fasten the flowers
- you can either color the frames or leave them in the original brown color!

Find this craft at: www.krokotak.com/2015/04/flower-panels/

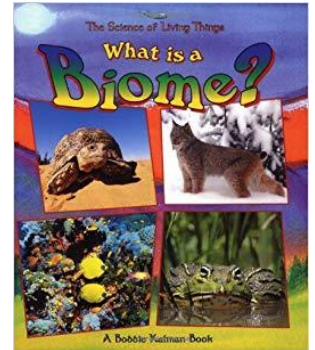


READ...

***What Is a Biome?* By Bobbie Kalman**

Earth has over 30 types of biomes, some of which are home to thousands of ecosystems. All of the plants and animals living in these huge natural areas depend on one another for survival. Intended for children of ages 6-12, this book explains the life in each major biome. It is illustrated with images and defines the concepts of biome and climate.

More information at: https://www.goodreads.com/book/show/1335990.What_Is_a_Biome



WATCH...

Biomes of the World for Children: Oceans, Mountains, Grassland, Rainforest, Desert – FreeSchool

From Antarctica to the hottest desert, there are many different places on Earth for plant and animals to live. Large groups of similar ecosystems are called biomes. You will probably recognize most of the biomes we visit in this video. Come learn a little more about them and the plants and animals that live there!

Video is available on YouTube here:

<https://www.youtube.com/watch?v=ofb8143ndo8>



VISIT...

The National Museum of Natural History is part of the Smithsonian Institution, the world's preeminent museum and research complex. The Museum is dedicated to inspiring curiosity, discovery, and learning about the natural world through its unparalleled research, collections, exhibitions, and education outreach programs. Opened in 1910, the green-domed museum on the National Mall was among the first Smithsonian building constructed exclusively to house the national collections and research facilities. Through its research, collections, education and exhibition programs, NMNH serves as one of the world's great repositories of scientific and cultural heritage as well as a source of tremendous pride for all Americans.



Regular Hours: Open daily except December 25, 10:00 AM - 5:30 PM.; Admission is **FREE**.

More information is available at: <https://naturalhistory.si.edu/visit/>

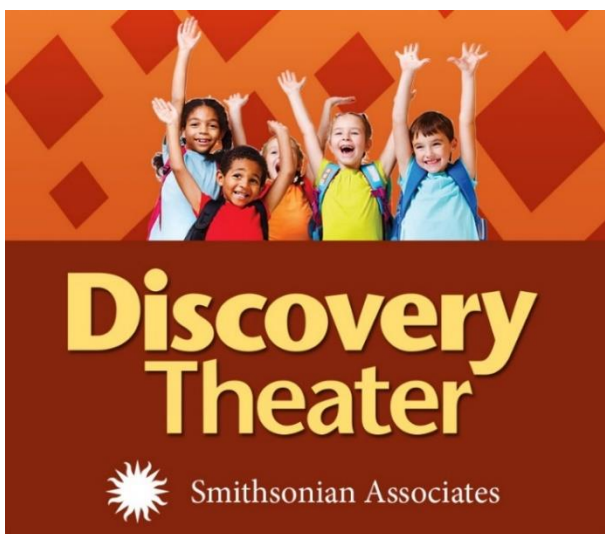


Smithsonian Institution

OUR MISSION: "THE INCREASE AND DIFFUSION OF KNOWLEDGE"

Smithsonian Associates advances the Institution's mission through life-enriching educational and cultural experiences inspired by the Smithsonian's research and collections for DC-region students, families, and adults, and for learning communities nationwide.

Discovery Theater has been presenting DC-area children with live educational performances for almost 40 years. With programs that enrich the Smithsonian experience for nearly 50,000 children annually, Discovery Theater is a gateway to the exhibits, collections, and themes contained in the museums and galleries on the National Mall and beyond. We explore American history and cultures, folk tales from around the world, and exciting, accessible science and math programs in the company of puppeteers, storytellers, dancers, actors, and musicians. Discovery Theater performances unite ideologies, enact themes that reflect the diversity of its audiences, open avenues of self-reflection, and offer an enjoyable means for parents and teachers to demonstrate life's lessons. There's so much to do and explore at the Smithsonian—and Discovery Theater is the ideal place to begin!



Our Location

The S. Dillon Ripley Center, 3rd Sublevel
1100 Jefferson Drive, SW
Washington, DC 20024

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