

What is a Biome?

All plants and animals, including humans, share the space on earth. Just a quick look at some plant and animal species shows us that every spot on earth is occupied by a plant or animal that has adapted to that type of habitat and lives well there. And, wonderfully enough, that type of environment or ecosystem is not suited for other species of plants and animals. For example, some plants thrive in the dense shade on the floor of the rainforest while others can only live in the hot, baking sun of the open desert. The same is true for animals. Polar bears are completely adapted to the freezing cold of the Polar Regions but reptiles, like snakes, need outside warmth in order to live.



In just a quick look at just a couple of plants and animals, we have talked about the arctic, the rainforest and the desert. These are examples of some of the biomes on earth. These examples are on land but there are biomes in the ocean too. A biome on land is called a terrestrial biome and a biome in the ocean or in fresh water is called an aquatic biome. A biome is any area that has its own species of plants and animals that are adapted to living in that environment.

You already know that the climate is much warmer at the equator than it is at the poles. One way that scientists classify biomes is by their latitude, that is, their distance from the equator. But temperature isn't the only part of how a plant or animal adapts to its environment. There's also altitude; some plants and animals thrive in high mountains while others live only in valleys. Plus, there's the amount of rainfall an area gets, as in rainforests and deserts.

Plants and animals have come to depend on each other. For example, panda bears need bamboo to eat and hawks prey on small rodents. The pieces of the puzzle of defining biomes are starting to come together. It's getting clear that all the living things that are adapted to a particular set of environmental and climate features are all related to each other. This is what a biome is.

A biome is an area of the earth that has plants and animals that are adapted to living there and cannot live somewhere else. These plants and animals rely on each other in some way for their survival. Areas of the earth with a similar climate and natural conditions will have similar types of plants and animals too. They will probably have the same kind of biome.