

Biomes of the World

The Biomes of the World are being used as a design theme in the upper elementary building because of the extensive focus that is placed on the environment in our science program in grades 4-6. In addition, the natural setting of the school lends itself to highlighting the importance of the environment.

Biologists divide the living world into major zones named biomes. Each biome has its own distinctive climate, plants, and animals. Campbell has called the biomes "the world's major communities, classified according to the predominant vegetation and characterized by adaptations of organisms to that particular environment." Various classifications can be found in different references, however; the biomes have been divided into five major areas in the development of the concept in the school. The five biomes we will be working with include: aquatic, deserts, forests, grasslands, and tundra.

Nearly 75 percent of the earth's surface is covered by water, thus the aquatic biome is the largest of the five. The aquatic biome, which can be further broken down into fresh water and marine regions, includes: ponds, lakes, streams, rivers, wetlands, oceans, coral reefs, and estuaries. A deep blue characterizes this biome.

Deserts cover approximately one-fifth of the earth's surface. The desert biome is classified into four major types: hot and dry, semiarid, coastal, and cold. This biome will be represented by a light brown or tan color in the school.

Although it has changed over time, approximately one-third of the earth's land area is covered by forests today. The present-day forest biomes are biological communities that are dominated by trees and other woody vegetation. Distinct forest types occur within each of these broad groups. There are three major types of forests: tropical, temperate, and boreal forests or taiga. The forest biome is characterized by a rich forest green color.

Grasslands are characterized as lands dominated by grasses rather than large shrubs or trees. There are two main divisions of grasslands: (1) tropical grasslands, called savannas, and (2) temperate grasslands. Savanna is grassland with scattered individual trees. Savannas, of one sort or another, cover almost half the surface of Africa and large areas of Australia, South America, and India. Temperate grasslands are characterized as having grasses as the dominant vegetation. Trees and large shrubs are absent. Temperate grasslands include the veldts of South Africa, the puszta of Hungary, the pampas of Argentina and Uruguay, the steppes of the former Soviet Union, and the plains and prairies of central North America. A little green color is used to represent grasslands.

Finally, tundra is the coldest of all the biomes. Tundra comes from the Finnish word *tunturia*, meaning treeless plain. It is noted for its frost-molded landscapes, extremely low temperatures, little precipitation, poor nutrients, and short growing seasons. Tundra is separated into two types: arctic tundra and alpine tundra. Tundra is depicted with an light, icy-blue color.

The biomes and the biome colors will not change over time. This will provide a timeless backdrop to the learning environment and provide an educational focus. One biome color will dominate each neighborhood in the school through the use of paint, countertops, and accents.