Biome, Sweet Biome Activity

Background:

Biomes: places with certain kinds of plants and animals living in a particular kind of climate. Climate is all those things caused by weather in an area, such as sunshine, temperature, humidity, and the amount of rain and snow. A good way to remember biome is think of it as "bio-home," or "home for life."

Desert biome: very specialized plants and animals living where there is usually lots of sun, hot summer temperatures, sandy soils and very little rain or snow.

Grassland biome: quite dry, but receives enough rain and snow to allow grasses and various bushes and small trees to grow there.

Deciduous Forest biome: has plants and animals quite different from the desert biome, where there are more fertile soils and more rain and snow falls during the year. Plants with big green leaves like oak and maple grow here. Deciduous describes plants or trees that shed their leaves annually.

Coniferous Forest biome: big evergreen trees with needles and cones, like pine, spruce and fir. These usually grow higher up the mountains where it is cooler and there is even more rain and snow. Coniferous describes trees and shrubs that bear cones and needle-like leaves.

Alpine biome: much cooler than the other biomes, with a short summer growing season and much smaller plants. In Utah this biome can only be found near the tops of the highest mountains.

Materials:

- Biome cards for Desert, Grasslands, Coniferous, Deciduous, and Alpine environments
- Pictures of Utah representing each of these biomes
- Geological map of Utah

Activities:

Describing Utah:

- Show students a geological map of Utah.
- Have the students suggest a variety of words we use to describe our state's different places and landscapes. (Descriptive words such as hot/cool, wet/dry, lots of people/few people or high/low are desirable, as are landscape names such as desert, mountain, salt flats, city, lake, etc.)
- Take students on "virtual field trip" of Utah. Show them various pictures of landscapes found in Utah telling them only the location. Be sure that each student has a good view of each picture.

- Go through the pictures again and have the students describe each land-scape. Help students create rich descriptions by asking them:
    - What is being shown?
    - What would it feel like if you were in this scene?
    - What would the ground feel like if you were walking on it?
    - What sounds would you hear?
    - What animals might you see?
- Post all or a representative group of the pictures on the wall or board asking the students how they might group them. Which ones are more alike, different, etc.?

Biomes as a way to describe and group landscapes:
- Explain that scientists have come up with a way to group the main kinds of landscapes on Earth. They call them biomes. The pictures we just looked at are parts of the five main biomes in Utah.
- Define biomes for them.
- Talk about the desert biome and let a student put the "Desert" biome card over the pictures that they think are those of the desert landscape. Do this same sequence with grasslands, deciduous forests, coniferous forests, and alpine biomes.
- See if the students can show an approximate location for each of the biomes on the Utah map.

Recognizing Utah Biomes:
- Show students pictures of five Utah biomes and ask them the following question.
- Have each student write the answers to this question on a piece of paper: Which of Utah's five biomes best matches each of the following places?
    - The lower parts of Big Cottonwood Canyon (deciduous)
    - Snowbird ski area (coniferous)
    - Salt Lake Valley (grassland)
    - Moab (desert)
    - Great Salt Lake (tricky, but both the desert and grassland biomes)
- Go over answers and discuss each one and the different components of each biome.