Module 10: Classification - Diversity in the Six Kingdoms
Topic 2 Content: Nonvascular Plants Notes

Introduction

Nonvascular Plants

Click ***NEXT*** to begin.

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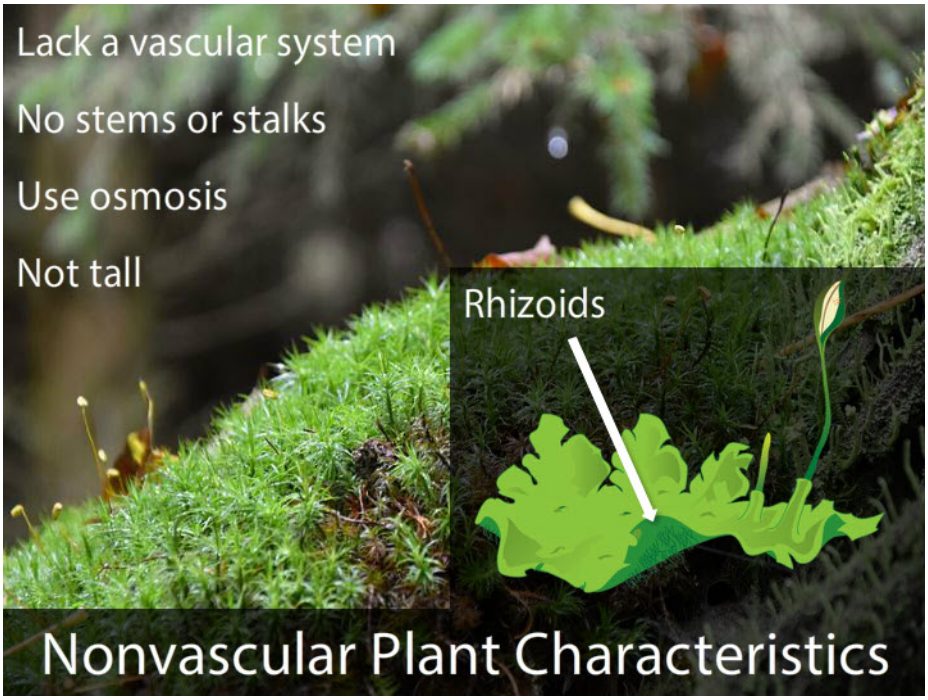
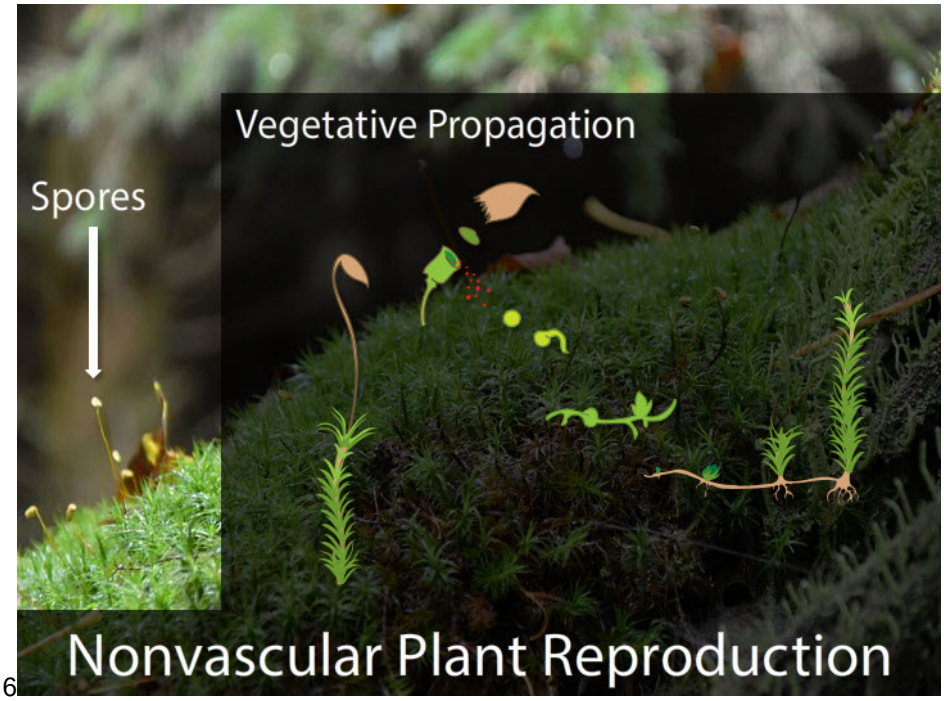
Nonvascular Plants



Nonvascular plants are small simple plants that lack a vascular system with vascular tissues. These plants do not contain a phloem or xylem. These plants do not have stems or stalks, and are not able to transport water and nutrients via a root system and capillary action. Nonvascular plants use osmosis to draw water a few centimeters above the ground. Because of the lack of a vascular system, nonvascular plants are not able to grow tall. Instead, these plants have structures called rhizoids that act as long, thin anchors that allow the plant to absorb nutrients from the soil. Nonvascular plants are commonly found in moist environments in order to be close to a water source, which allows them to absorb the water right into the main part of the plant.

Nonvascular Plants Reproduction



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Nonvascular plants reproduce sexually by creating single-celled spores. Nonvascular plants can also reproduce by vegetative propagation. This occurs when part of the plant breaks off and develops into a new plant, with the exact same genetic information as the original plant.

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Nonvascular Plants Examples

Nonvascular plants are also referred to as bryophytes. Examples of bryophytes include mosses, liverworts, and hornworts.

Click each marker to learn about the different types of nonvascular plants.

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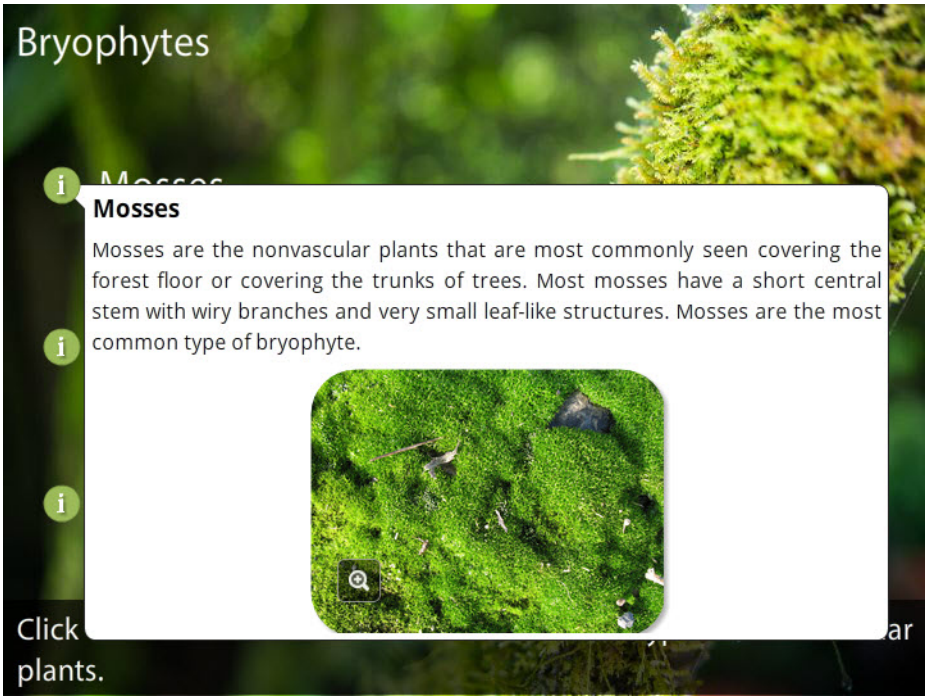
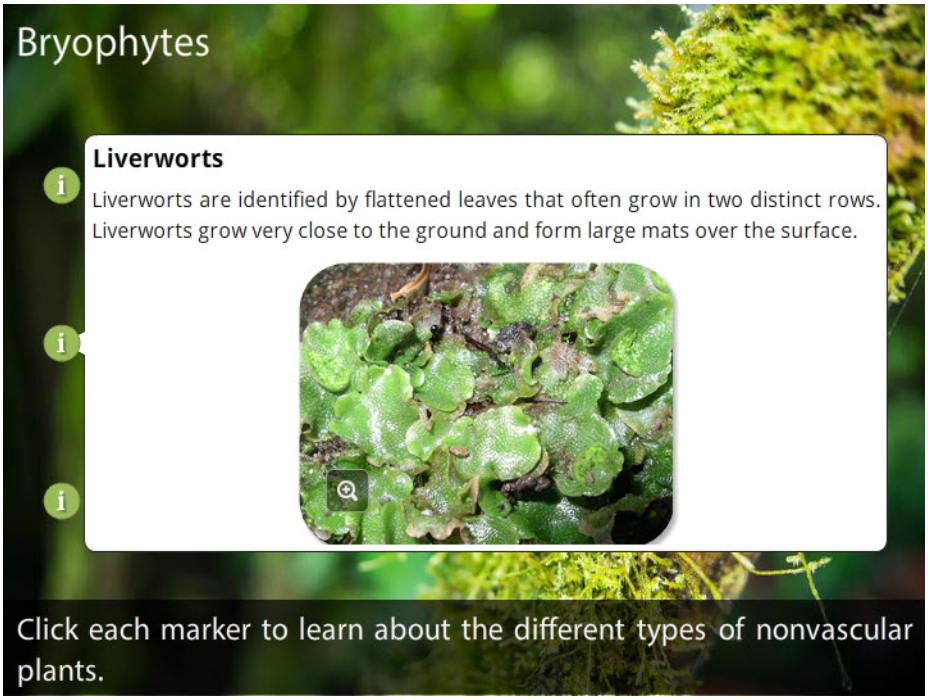
Mosses



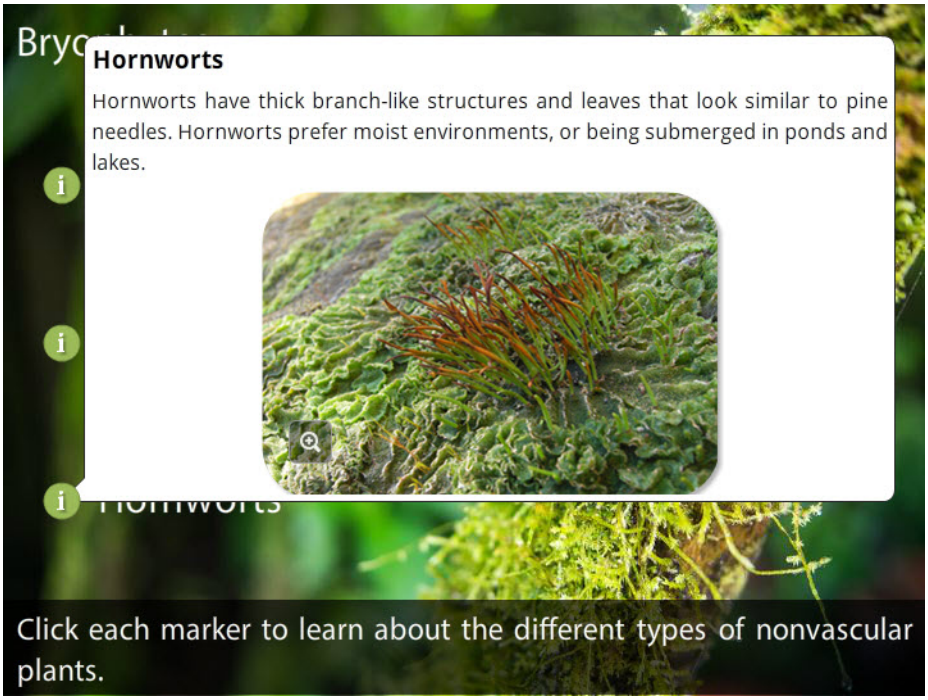
Mosses are the nonvascular plants that are most commonly seen covering the forest floor or covering the trunks of trees. Most mosses have a short central stem with wiry branches and very small leaf-like structures. Mosses are the most common type of bryophyte.

Liverworts



Liverworts are identified by flattened leaves that often grow in two distinct rows. Liverworts grow very close to the ground and form large mats over the surface.

Hornworts



Hornworts have thick branch-like structures and leaves that look similar to pine needles. Hornworts prefer moist environments, or being submerged in ponds and lakes.