



Tree Anatomy

Understanding the Parts of a Tree

Learning Goals

By the end of this lesson, you will be able to:

- Identify the main parts of a tree.
- Explain the function of roots and the trunk.
- Describe different types of branches.
- Understand how leaves make food.
- Recognize the role of flowers and fruit.



Key Vocabulary



Trunk

The main stem of the tree that supports the branches.



Roots

Parts underground that anchor the tree and absorb water.



Scaffold

The main side branches that form the tree's frame.



Spur

Short twigs that bear flowers and fruit.

Roots: The Anchor

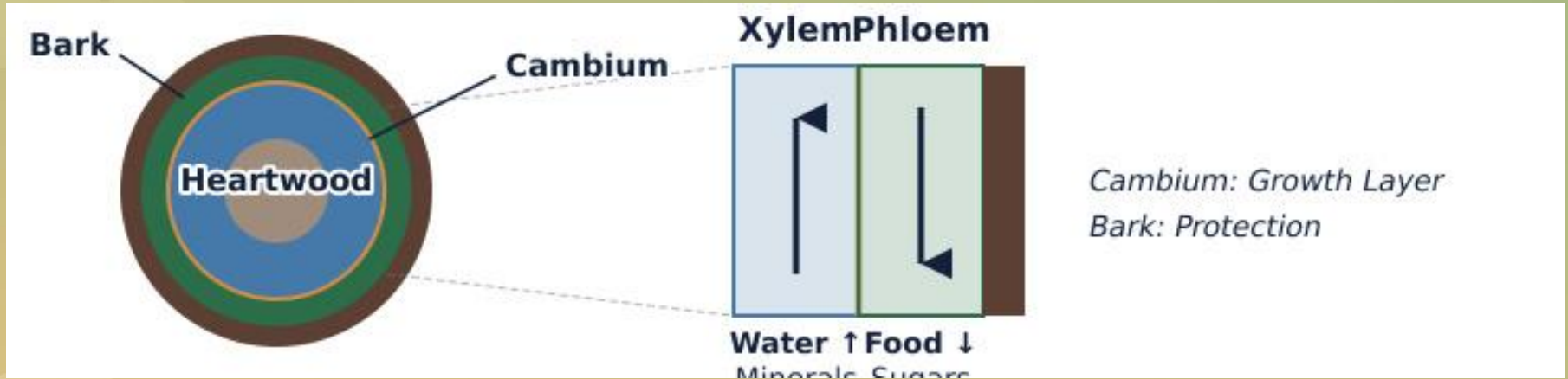
Roots anchor plants and absorb water and nutrients from the soil.



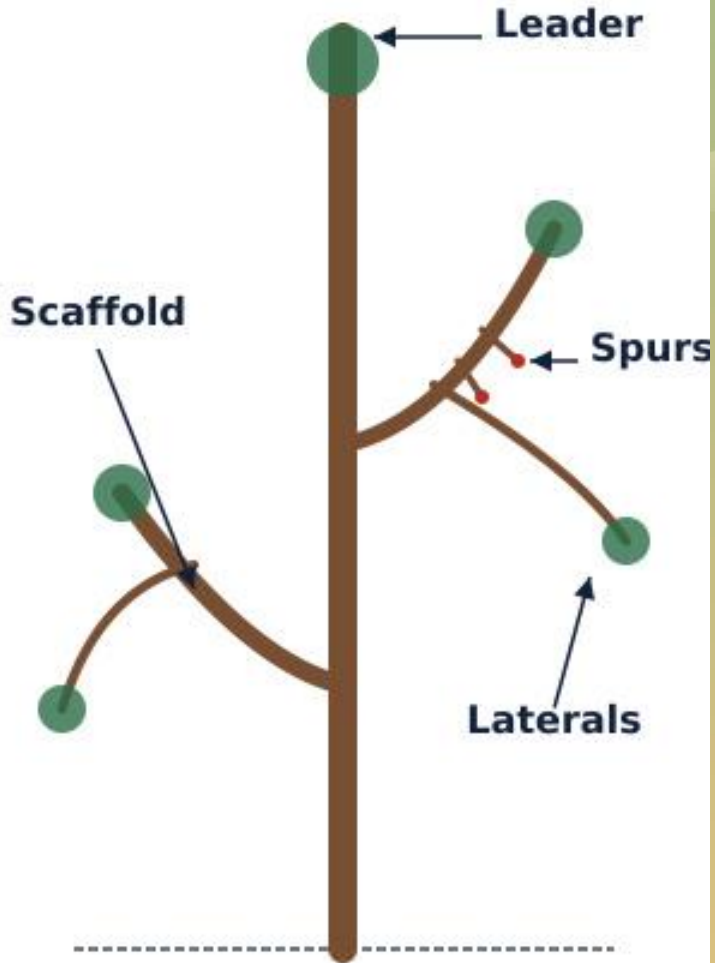
Without roots, the tree would fall over. Without water and nutrients, the tree cannot grow or make food.

The Trunk: Plumbing Pipes

The trunk acts as two pipes: an inner one for water (roots to leaves) and an outer one for food (leaves to rest).



The trunk also provides strong **support** for all the branches, leaves, and fruit.



Types of Branches

1

Leader

The central, highest branch. It is the continuation of the trunk.

2

Scaffold

The main side branches. They create the frame of the tree.

3

Laterals

Smaller branches that grow horizontally from the scaffold limbs.

4

Spurs

Short twigs where flowers and fruit grow.

Unwanted Shoots



Suckers

Leafy shoots that grow from the roots or tree crown. They steal water and nutrients and should be removed.

Water Sprouts

Shoots that grow straight up from pruned parts.

Hangers

Branches that droop down because of the heavy fruit from the past year.

Leaves and Photosynthesis

Making Food

Food is made in the leaves using sunlight. This is called photosynthesis.

How it Works

Chlorophyll in the leaves combines with the sun's energy to create **carbohydrates** (food).



Check Your Understanding

Answers on the next slide...

What is the main function of the leaves?

1. To anchor the tree in the ground.

2. To carry water up to the branches.

3. To make food using sunlight.

4. To support the trunk.

Check Your Understanding



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Summary

Tree Parts Review

- **Roots** anchor the tree and take in water.
- The **Trunk** moves water up and food down.
- **Branches** support leaves and fruit (Leader, Scaffold, Laterals).
- **Leaves** make food through photosynthesis.
- **Flowers** and **Fruit** help the plant reproduce.

