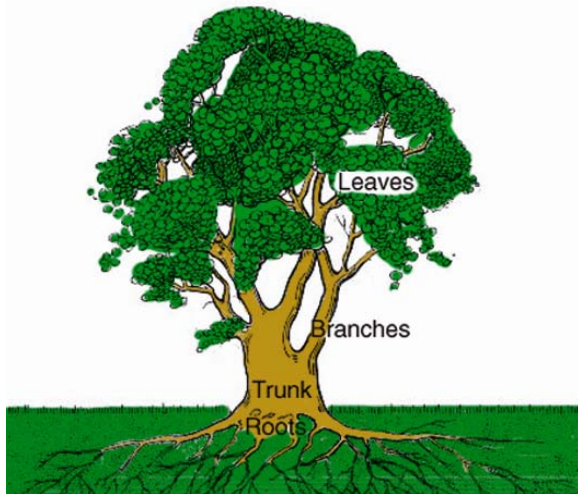


All About Trees

by Joy Dickerson

Trees live almost everywhere. They are in hot places and cold places. They are in cities and in places far from people. Some are tall and some are short. Some have huge leaves, and others have tiny leaves shaped like needles. But all trees have leaves, branches, a trunk, roots, and seeds.

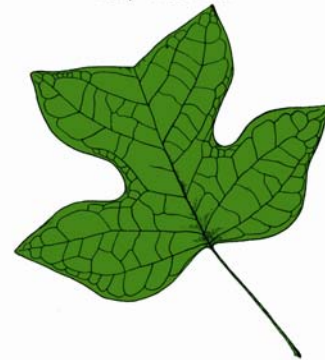


Leaves

Each type of tree has leaves that look different. Longleaf pine leaves look like needles. Pine trees drop needles a few at a time all year. Tulip-tree leaves are round on the bottom and square on the top. Tulip-trees drop all their

leaves in September. New leaves grow in the spring.

Tulip-Tree Leaf



Leaves use water, minerals, sunlight, and a gas called carbon dioxide to make the tree's food. Leaves also use the chemical chlorophyll to make food. Chlorophyll makes leaves green. When you eat plants, you eat the food the leaves made. Leaves give off a gas called oxygen. You must have oxygen to stay alive. Much of the oxygen you breathe comes from trees.

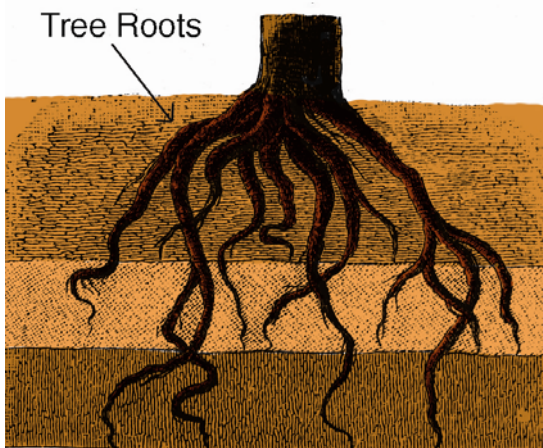
Trunks and Branches

A tree's trunk is round and firm. Near the top, it divides into smaller branches. The smallest

branches are called twigs. Twigs hold the leaves. The bottom of the trunk splits into smaller and smaller roots. Inside the trunk are millions of strong, tiny tubes. They carry water and minerals from the roots to the leaves. Other tubes carry food from the leaves to the roots. The trunk is covered with bark that protects the tree.

Roots

An important part of a tree—its roots—are buried. The roots push deep into the ground and keep the tree from falling over. Some trees have one main root that grows very deep. But most trees have shallow, branching roots that spread over a wide area.



Roots split into smaller roots. Eventually, the roots are smaller around than a hair. The roots take water and minerals from the soil. The tubes in the trunk carry these substances to the leaves. The tubes also carry food from the leaves back to the roots. Food is stored in the roots.

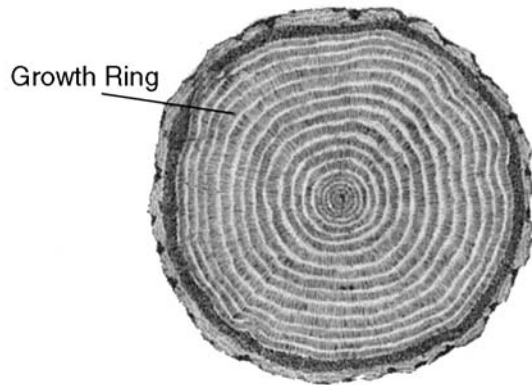
Seeds

Trees make seeds. When seeds reach the ground, a few grow into new trees. But most become food for animals. Almonds and walnuts are tree seeds that you may have eaten. One kind of seed comes in a cone. Pine cones contain seeds. Other seeds come in fruits and nuts. Animals eat them and help to spread the seeds. Other seeds are light enough to be blown by the wind to a new home. Tulip-tree seeds spread this way.

How a Tree Grows

Each year a tree lives, it adds a ring of tubes just under the bark. The older, dead rings are in the center of the tree. When a tree is

cut down, you can count the rings. The number of rings equals how many years the tree lived. If a ring is wide, the weather was good that year. If a ring is narrow, the weather was bad.



Trees continue to grow as long as they are alive, adding a ring every year. The oldest trees are bristlecone pines. Some are 5,000 years old. That makes them the oldest living things on Earth.