

Sugar Stalks

Did you know that sugar comes from a stalk? Juice is squeezed from the stalks of the sugarcane plant. The liquid is then dried. Pure sugar is left over.

Sugar used to be very rare and valuable. Then Europeans discovered that sugarcane grew very well in the Americas. Growing sugar was one of the major reasons the first explorers came to the Americas. In fact, Christopher Columbus was the first person to bring sugarcane plants from the new world. Now, sugar is common and cheap to buy.

sugarcane stalks ➔

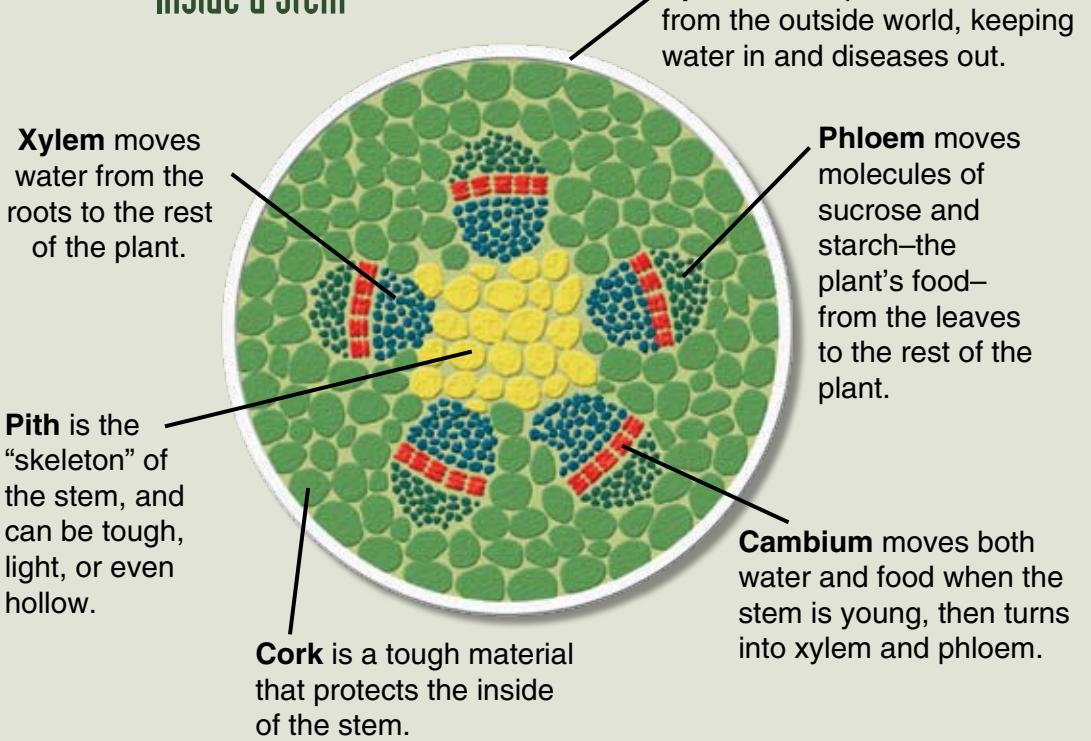


Stems and Stalks

Stems and stalks hold up plants and give them shape. They also hold the plumbing system of the plant. Water and nutrients are sucked out of the soil by the roots. Then they are sent up to the leaves through tiny pipes, called **xylem** (ZY-luhm). Some water is lost through tiny pores in the stem and leaves called **stomata** (stoh-MAH-tuh). As the plant matures, or grows older, the stems grow longer and bigger around.

Over time, the outside of the stem becomes rough and thick, like **bark**. This helps to protect the plant. Many plants can grow spikes or thorns. These help keep the plants from being eaten by animals.

Inside a Stem





Leaves

Leaves are the most obvious part of plants and trees. They provide shade for us on hot days. Leaves are pleasant to look at. They also have an important job. Inside the leaves is where all the business of making food for the plant takes place.

Leaves take on different shapes and sizes. This depends on the weather where they are found. The leaves have adapted to the climate over time. Leaves on pine trees are called needles. Leaves on palm trees are called fronds. Some leaves are soft and hairy, while some are smooth and shiny.



◀ This magnified image shows open stomata on the surface of a leaf. Stomata are pores found on the leaf surface. They control the exchange of gases from the leaf to the atmosphere.

► Leaves can be found in many shapes and sizes.



Medicine From Plants? Imagine That.

For thousands of years, people have used natural medicines that they get from plants. This type of medicine is called **herbology**. Leaves, stems, and roots from specially selected plants and trees are used. Then they are blended to target a specific illness. The mixture of herbs or leaves is often brewed into a tea. Then a patient drinks it. People of many cultures have used plants as natural remedies. They've been doing this since before history was recorded. Many modern medicines originated as herbal cures, too. Next time your doctor gives you some medicine, ask her if it came from an herbal cure.