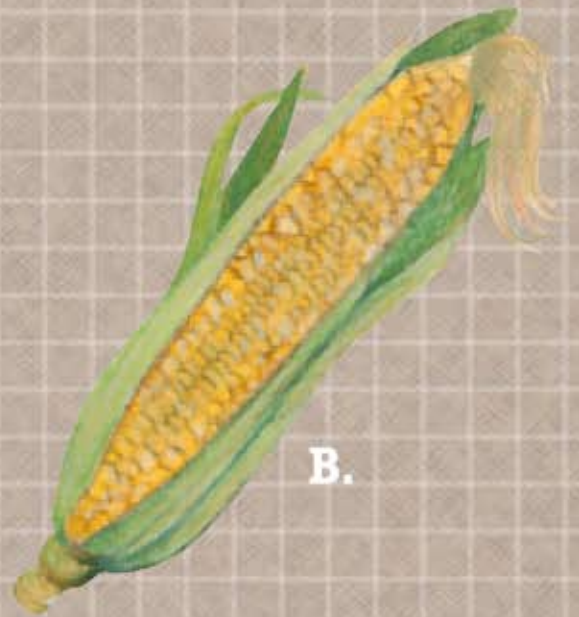




A.



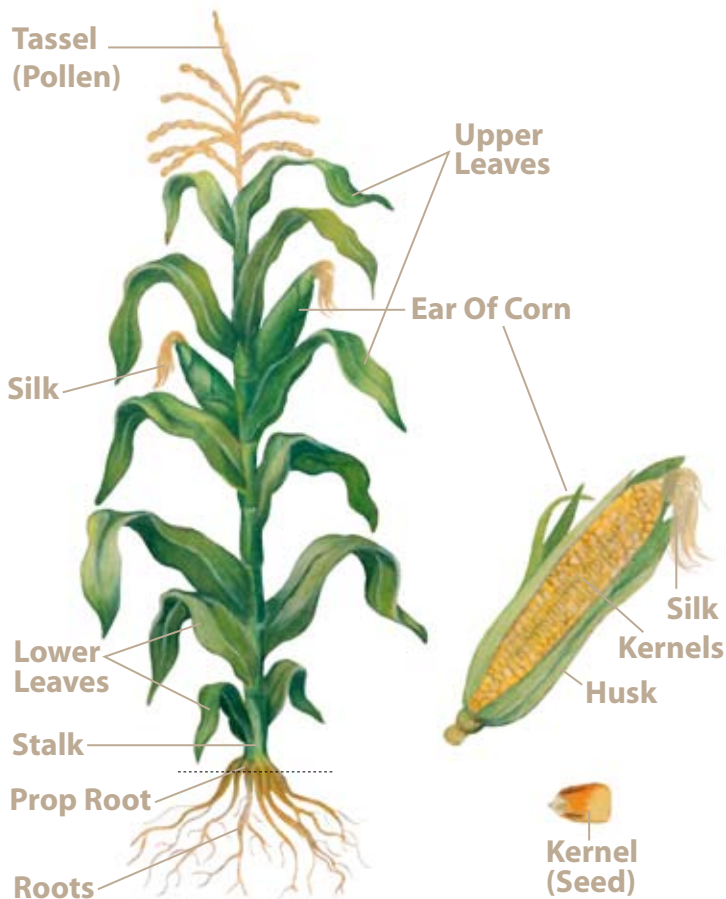
B.



C.

CORN

CORN



On The Front

A. Corn Plant

Corn is an annual plant that grows seven to ten feet tall. Strong roots called prop roots help support the cornstalk. A tassel grows at the top of each jointed cornstalk and contains hundreds of small flowers that produce pollen. Long, swordlike leaves grow outward from the stalk and end in a pointed tip.

B. Ear of Corn with Kernels

Ears of corn grow where the leaves join the stalk. A plant normally has one or two ears. Special leaves, called husks, protect each ear. An ear consists of a corncob covered with rows of kernels. An ear may have 12, 14, 16 or more rows of kernels.

C. Single Kernel or Seed

Each corn kernel has what looks like a silk thread that runs from the kernel up the row, and sticks out of the husk at the end of the ear. This thread is called the corn silk. Each silk needs to be pollinated to produce a kernel of corn.

Corn

Most of the corn grown in the United States is produced in the Corn Belt, which includes Illinois, Indiana, Iowa, Minnesota, Missouri, Nebraska, Ohio and South Dakota. Producers in the United States feed the largest part of the corn crop to cattle, hogs, sheep and poultry. The rest is used for processed food or industrial products such as ethanol, cornstarch and plastics. The U.S. exports corn to such countries as Japan and Mexico.

The different types of corn include dent corn, sweet corn, popcorn and food grade corn. Dent corn is commonly called "field corn" because it is fed to livestock. Sweet corn, popcorn and food grade corn are used for human food.

Field Corn

Producers use hybrid seeds to grow crops each year. Hybrid corn is made by crossing two or more corn plants to produce a reliable corn seed. Corn is planted in the early spring using a corn planter. The machine drops the kernels into rows and then presses the soil around each kernel. A producer may cultivate the corn when it is still small. This is similar to hoeing a garden. It helps get rid of the weeds that compete with the corn plants for water and nutrients.

The Growing Factor

Today's producer grows a bushel of corn with only six minutes of labor using tractors and special equipment. Native Americans, by hand-planting, hand-hoeing and hand-picking, required 20 hours of labor to produce the same amount.

Before a producer plants the corn seeds, fertilizer is placed in the soil that helps feed the corn plant. Rain is extremely important because the corn plant needs water to grow. If rain is not adequate, ground or surface water can be applied. This is called irrigation.

Sometime between late September and November the corn will be dry enough to be picked or harvested. Corn is harvested by a large combine. The machine removes the ear of corn and separates the kernels from the corn cob. Parts of the corn plant are left in the field to protect the soil for the next year.

Products

The corn kernels are transported to processing plants to be used in food and industrial products. Corn can be found in more than 3,500 products in a grocery store. Fructose, a liquid sweetener from corn, is used to sweeten soda pop, candy, cake and cookie mixes, to name just a few items.

Ethanol is a renewable fuel made from corn and blended with gasoline for use in cars, small engines, trucks and buses. It reduces pollution emissions and reduces U.S. dependence on foreign oil. Distillers grain is a co-product of ethanol production that is used to feed livestock. Corn, ethanol and distillers grain are important products to producers and consumers.

Poly-lactic acid (PLA) is derived from the starch of the corn kernel. It is reducing dependence on foreign oil and is being used in the production of packaging materials, plastic cups, plates, table service, golf tees and other plastic products. PLA is used in fibers for clothing and carpet. These products from PLA are friendly to the environment and biodegradable when composted.