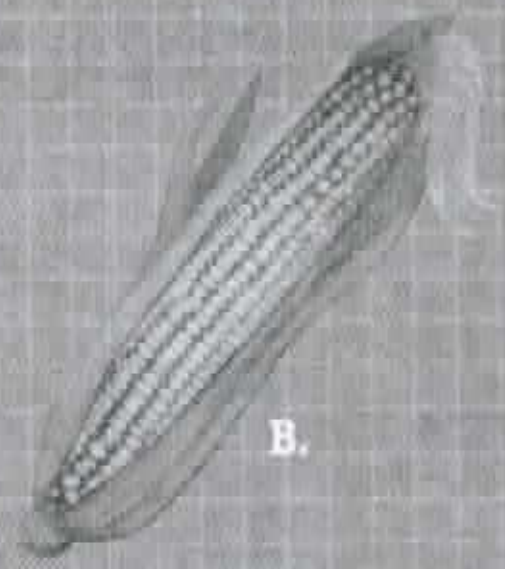




A.



B.



C.

CORN

Blair

CORN



**Top 10 Minnesota Counties
Producing Corn for Grain in 2007:**
Renville, Martin, Faribault, Redwood, Mower, Freeborn,
Nobles, Cottonwood, Jackson and Blue Earth

On The Front

A. Corn Plant

Corn is an annual plant that grows 7 to 10 feet tall. Strong fibrous roots called prop roots help support the cornstalk. A tassel (male) grows at the top of each jointed cornstalk and contains hundreds of small flowers that produce pollen. Long, sword-like 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 may have 10 to 18 or more rows of kernels (always in pairs). Ears have 300-600 kernels.

C. Single Kernel or Seed

Each corn kernel has what looks like a silk (female) 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. In 2007, Minnesota ranked fourth nationally. 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, sweeteners 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 flint corn. Dent corn is commonly called "field corn" because it is fed to livestock. Sweet corn, popcorn and flint 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.

The growing season is generally from 75 days in northern Minnesota to 120 days in southern Minnesota. 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.

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

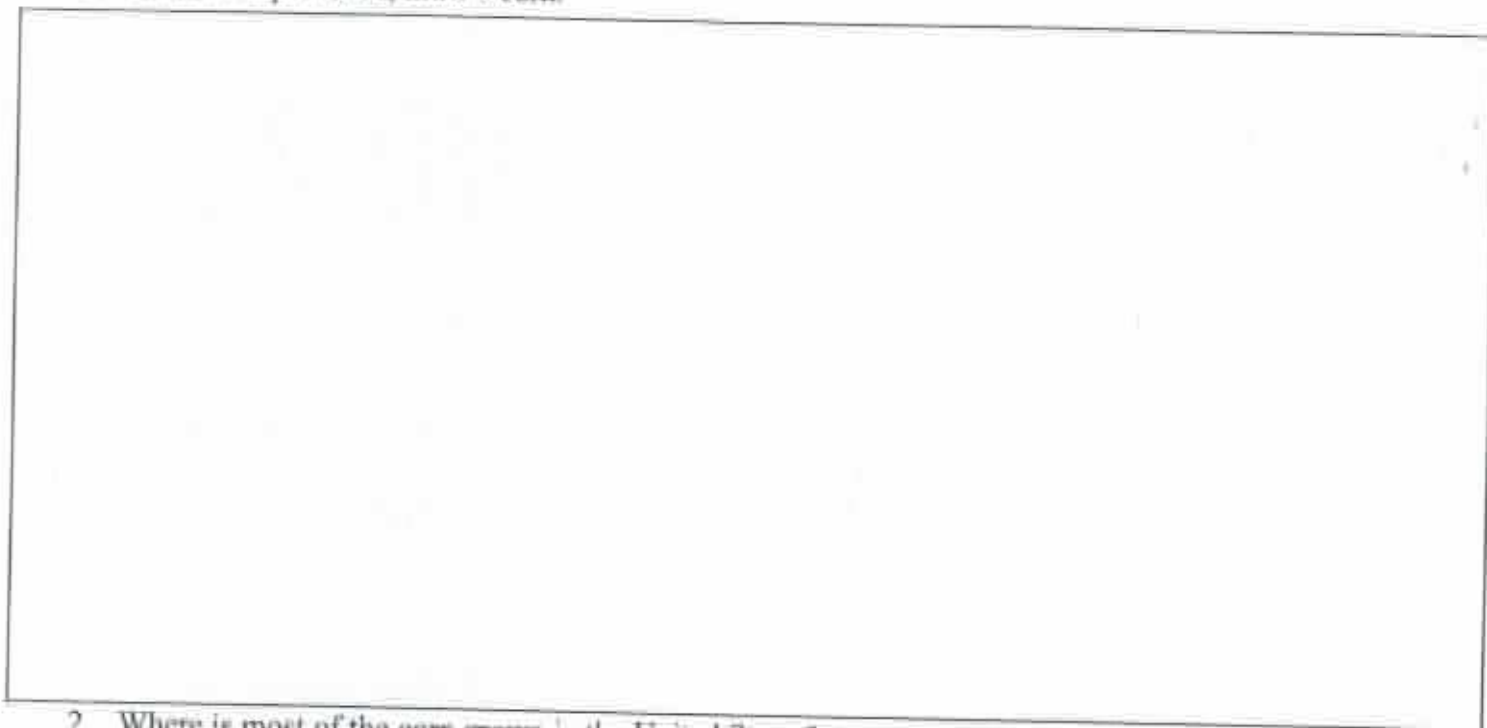
The corn kernels are transported to processing plants to be used in food and industrial products. Corn can be found in more than 3,500 products in a grocery store. Fructose, a liquid sweetener from corn, is used to sweeten soda pop, candy, cake and cookie mixes, to name just a few items.

Ethanol is a renewable fuel made from corn and blended with gasoline for use in cars, small engines and trucks. 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.

CORN

1. In the box provided, draw a corn.



2. Where is most of the corn grown in the United States?
3. What is the majority of corn used for?
4. Where does the U.S. export corn?
5. How is hybrid corn made?
6. How has corn growing changed time wise?
7. Describe the growing season of corn.
8. Identify five different things corn can be found in.
9. Using your map of Minnesota counties, create a symbol for corn and mark the top 10 counties that produced corn for grain in 2007.