Modern Marvels Quiz – Corn

Submitted by Jennifer Waters and used in cooperation with the University of Illinois at Urbana-Champaign.

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Modern Marvels Film Quiz

Corn

The acreage of corn planted each year is the size of the state of ______________________

Sweet Corn

How much corn is processed in one hour at the sweet corn plant? ________ tons

How are the kernels removed from the cob? _______________________

What are the cobs and leaves used for once removed from the corn? ______________________

Corn in the can has a shelf life of _____ years?

Total time it takes the corn from arriving at the plant until canned and shipped? _______ min

Sweet corn represents less than ______% of all corn grown in US.

Field Corn

Field corn is also known as ____________ corn

______ lbs corn are grown for each person on the planet (6.6 billion people)

US produces _____% of world’s corn

_______ people are fed by one US farmer

More than ________% of field corn is for animal feed

Popcorn

Popcorn stores _____________ in tiny pockets inside starch

Popcorn is less than _____% of the US corn production

_________________________ consists of IL, IN, OH, IA; 50% of US corn supply

Uses of Corn

Over ________ nonfood items, from adhesives to explosives
Nature Works company in NE, converts corn into _____________

Once composted, corn plastic can break down in ________________ days

All corn has been __________________ meaning it can’t exist without human intervention

Corn Genetics

Seed corn is a _________________, resulting from two inbred plants

Heterosis in plant breeding refers to ______________________________

Why do growers have to go back to buy seed corn from companies each year?

_________________________________________________________________

The first corn plant originated from the _________________________ plant

Genetically modified corn has special ____________ (traits) from another species to help do something very specific

Bt corn contains a bacteria protein that inhibits damage from ______________________ insect.

DNA from one plant or animal is __________________ into the embryo of another

A genetically modified seed must be grown in ______________________

Why is corn grown in the Merengo Warehouse in a former mine?

_________________________________________________________________

Ethanol

What is ethanol used for?

What is the benefit of using corn to produce ethanol?

What are some drawbacks to producing ethanol from corn?

It takes approx ______ hours to produce corn into ethanol

What corn byproduct contributes to the obesity epidemic? _____________________________
Name __________________________

Modern Marvels Film Quiz
Corn KEY

The acreage of corn planted each year is the size of the state of ______________________

Sweet Corn

Sweet corn takes ___60___ days of growth before harvested.

How much corn is processed in one hour at the sweet corn plant? ___35____ tons

How are the kernels removed from the cob? Sharp blades

What are the cobs and leaves used for once removed from the corn? Animal feed

Corn in the can has a shelf life of _3_ years?

Total time it takes the corn from arriving at the plant until canned and shipped? __25__ min

Corn represents less that _1__% of all corn grown in US.

Field Corn

Field corn is also known as __dent__ corn

__ 110__ lbs corn grown for each person on the planet (6.6 billion people)

US produces __40%_ of world’s corn

__143__ people fed by one US farmer

More than _70%_ of field corn is for animal feed

Popcorn

Popcorn stores ___ water__ in tiny pockets inside starch

Popcorn is less than _2_ % of the US

__Corn Belt__ consists of IL, IN, OH, IA; 50% of US corn supply; IA #1
Uses of Corn

Over 400 nonfood items, from adhesives to explosives

NatureWorks company in NE, converts corn into plastic

Once composted, corn plastic can break down in 40-80 days

All corn has been domesticated meaning it can’t exist without human intervention

Corn Genetics

Seed corn is a hybrid, resulting from two inbred plants

Heterosis in plant breeding refers to better offspring than parents

Why do growers have to go back to buy seed corn from companies each year?

Offspring from hybrids don’t have superior characteristics anymore

The first corn plant originated from the teosinte plant

Genetically modified corn has special genes (traits) from another species to help do something very specific

Bt corn contains a bacteria protein that inhibits damage from European corn borer insect.

DNA from one plant or animal is transplanted into the embryo of another

A genetically modified seed must be grown in test plots

Why is corn grown in the Merengo Warehouse in a former mine?

No sunlight, rain, insects, animals to interrupt corn growth (controlled farming)

Ethanol

What is ethanol used for?

What is the benefit of using corn to produce ethanol?

What are some drawbacks to producing ethanol from corn?

It takes approx 65 hours to produce corn into ethanol
What corn byproduct contributes to the obesity epidemic? High fructose corn syrup