Name: _____ Date: _____

From Wild Grass to Corn on the Cob

Circle group

Corn, also called maize, feeds people and animals all over the world. But its wild ancestor looks nothing like the cobs in a store. The ancestor is a grass called teosinte. It still grows wild in parts of Mexico.

Teosinte has small spikes with just a few hard kernels. Each kernel sits in a stony case. No one would grind it into meal. Still, scientists have used genes and old digs to learn that farmers in southern Mexico began to grow teosinte thousands of years ago.

The change was slow. It came from selection. Each season, farmers saved seeds from plants with the biggest ears or kernels that were easy to remove. They planted those seeds. Over many generations, the plants changed. The ears grew bigger. The kernels grew more numerous and were not hidden. The plant grew one main stalk instead of many branches. In time, the plant could not scatter its own seeds. The kernels stay tied to the cob. So corn needs people to plant it.

Farmers also bred kinds of corn for different climates and tastes. That is why corn comes in yellow, white, red, blue, and purple. Corn spread through the Americas and, after 1492, around the world.

Corn matters for what it gives, too. Its kernels can be ground into meal and flour, cooked fresh, or popped. Farmers also feed it to animals. Modern fields often have only a few kinds of corn. So scientists value the many older kinds and wild cousins. They hold useful traits that breeders may need in the future.

Questions

1. What is the wild ancestor of corn?

_____

_____

2. Where does teosinte still grow wild?

_____

_____

3. How did farmers change the plant over time?

_____

_____

4. Why would no one grind teosinte into meal?

_____

_____

5. Why does corn need people to plant it now?

_____

_____

6. Why does corn come in so many colors?

_____

_____

Words to know

ancestor: an earlier type of plant or animal that later kinds came from
teosinte: a wild grass from which corn was bred
selection: choosing certain plants or animals to breed
generations: groups of plants or animals born one after another

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

From Wild Grass to Corn on the Cob

Triangle group

Corn, also called maize, feeds people and animals all over the world, yet its wild ancestor looks nothing like the cobs in a grocery store. The ancestor is a grass called teosinte, which still grows wild in parts of Mexico.

Teosinte has small spikes with only a handful of hard kernels, each locked inside a stony case. Nobody would think to grind it into meal. Yet scientists, using both genetic evidence and archaeology, have concluded that farmers in southern Mexico began growing teosinte thousands of years ago.

The change was slow and came through selection. Each season, farmers saved seeds from the plants with the biggest ears or the kernels that were easiest to remove, and they planted those. Over many generations, the plants changed. The ears grew larger, the kernels grew more numerous and more exposed, and the plant became one main stalk instead of many branches. In time, the plant could no longer scatter its own seeds. The kernels stayed tied to the cob, so corn now depends on people to plant it.

Farmers also kept breeding varieties for different climates and tastes, which is why corn comes in so many colors, including yellow, white, red, blue, and purple. Corn spread through the Americas and, after 1492, around the world.

Corn matters for what it gives, too. Its kernels can be ground into meal and flour, cooked fresh, or popped, and farmers also feed it to animals. Because modern fields often contain only a few varieties, scientists value the many older varieties and wild relatives as a store of useful traits that breeders may need in the future.

Questions

1. What is the wild ancestor of corn?

_____

_____

2. Where does teosinte still grow wild?

_____

_____

3. How did farmers change the plant over time?

_____

_____

4. Why would nobody want to grind teosinte into meal?

_____

_____

5. Why does corn now depend on people to plant it?

_____

_____

6. Why does corn come in so many colors?

_____

_____

Words to know

ancestor: an earlier type of plant or animal that later kinds came from
teosinte: a wild grass from which corn was bred
archaeology: the study of the past by digging up old objects and remains
selection: choosing certain plants or animals to breed
generations: groups of plants or animals born one after another

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

From Wild Grass to Corn on the Cob

Square group

Corn, also known as maize, nourishes people and animals all over the world, yet its wild ancestor bears almost no resemblance to the cobs sold in a grocery store. The ancestor is a grass called teosinte, which still grows wild in certain parts of Mexico.

Teosinte produces small spikes with only a handful of hard kernels, each one locked inside a stony case. Hardly anyone would think of grinding it into meal. Nevertheless, scientists, drawing on both genetic evidence and archaeology, have concluded that farmers in southern Mexico began cultivating teosinte thousands of years ago.

The transformation was gradual and came about through selection. Each season, farmers saved seeds from the plants with the biggest ears or the kernels that were easiest to remove, and they planted those seeds the following year. Over many generations, the plants changed dramatically. The ears grew larger, the kernels became more numerous and more exposed, and the plant developed one main stalk instead of many branches. Eventually, the plant lost the ability to scatter its own seeds. The kernels remained tied to the cob, so corn now depends on people to plant it.

Farmers also continued to breed varieties suited to different climates and tastes, which explains why corn comes in such a wide range of colors, including yellow, white, red, blue, and purple. Corn spread throughout the Americas and, after 1492, around the entire world.

Corn matters for what it provides as well. Its kernels can be ground into meal and flour, cooked fresh, or popped, and farmers also feed it to animals. Because modern fields often contain only a few varieties, scientists value the many older varieties and wild relatives as a reservoir of useful traits that breeders may need in the future.

Questions

1. What is the wild ancestor of corn?

_____

_____

2. Where does teosinte still grow wild?

_____

_____

3. How did farmers gradually change the plant?

_____

_____

4. Why would hardly anyone think of grinding teosinte into meal?

_____

_____

5. Why does corn now depend on people to plant it?

_____

_____

6. What explains the wide range of colors in corn?

_____

_____

Words to know

ancestor: an earlier type of plant or animal that later kinds came from
teosinte: a wild grass from which corn was bred
archaeology: the study of the past by digging up old objects and remains
selection: choosing certain plants or animals to breed
generations: groups of plants or animals born one after another

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: From Wild Grass to Corn on the Cob

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: From Wild Grass to Corn on the Cob

Easier · 259 words · Flesch-Kincaid grade 3.8

1. A grass called teosinte.
2. In parts of Mexico.
3. They saved and planted seeds from plants with the biggest ears and easy kernels.
4. It has only a few hard kernels in stony cases.
5. Its kernels stay tied to the cob, so the plant cannot scatter its own seeds.
6. Farmers bred kinds for different climates and tastes.

Triangle: From Wild Grass to Corn on the Cob

This passage · 269 words · Flesch-Kincaid grade 8.2

1. A grass called teosinte.
2. In parts of Mexico.
3. They saved and planted seeds from the plants with the biggest ears and easiest kernels.
4. It has only a few hard kernels inside stony cases.
5. Its kernels stay tied to the cob, so the plant cannot scatter its own seeds.
6. Farmers kept breeding varieties for different climates and tastes.

Square: From Wild Grass to Corn on the Cob

Harder · 290 words · Flesch-Kincaid grade 10

1. A grass called teosinte.
2. In certain parts of Mexico.
3. They saved and planted seeds from the plants with the biggest ears and the easiest kernels.
4. It has only a handful of hard kernels locked in stony cases.
5. Its kernels remain tied to the cob, so the plant cannot scatter its own seeds.
6. Farmers kept breeding varieties suited to different climates and tastes.