



We Grow Corn! – Our Farm

Unit 1

Introduction

Unit 1 gives an overview of what will be learned in more detail in the remaining five units. By reading the entire “We Grow Corn!” book the reader is introduced to the farmers, Brad McCauley and Steve Rome, and gets them excited to learn about growing corn. In the remaining units, the reader will dig deeper into the topics of growing corn by referencing back to certain pages.

Time

45 minutes – 1 hour

Materials

- “We Grow Corn! Raising corn on a Kansas family Farm” by Sharon Thielen, Ph.D.
 - Also available online, read by the author (20:24) (available at wegrowcorn.com)
- Videos to watch:
 - Kernels of Knowledge Video: Meet Farmer Brad McCauley (2:36) (available at wegrowcorn.com)
 - Kernels of Knowledge Video: Meet Farmer Steve Rome (1:44) (available at wegrowcorn.com)
- Activity: Corn Plant Growth Cycle Activity (15-20 minutes)
 - ½ printed cardstock with four growing cycle sections
 - 16 corn kernels
 - Three small brown rectangle pieces
 - Two sprout stickers
 - Two brown leaf cutouts
 - Glue
 - Crayons/markers/colored pencils
- Snack: Corn Nuts
- Extension Activity/TEACH-Flex Lesson (see lesson for material list)
- Technology for Online Challenge (available at wegrowcorn.com) (10 minutes)

Book

To begin the unit, read “We Grow Corn! Raising corn on a Kansas family Farm” by Sharon Thielen, Ph.D. The book was designed for many different reading levels. If the readers are elementary level, you can choose to skip some of the more advanced fact bubbles. The book gives a great overview of the growing stages of corn which is the base for this unit’s activity. If readers have questions, keep in mind that more details will be discovered in following units, however you can choose to answer questions as you go. When reading the book in this unit, focus their attention on the Growth Cycle of corn.

*Remote learners can watch the author read the book online at wegrowcorn.com.

Videos

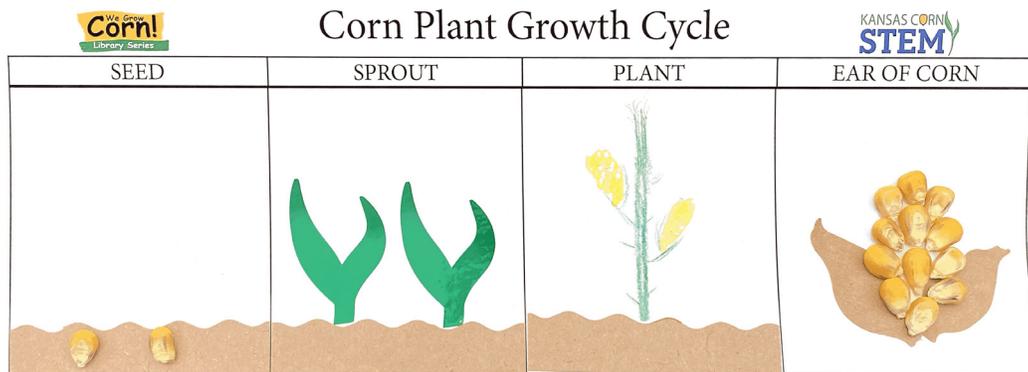
The Kernels of Knowledge videos allow the reader to dig deeper into the details related to growing corn. Each video features the farmers from the book as they show details about how they grow corn. This is a great way to see what it is like to drive a tractor or combine and what it looks like in the field.

The reader will be introduced to the farmers who share information about their farms in the book and on video. The following videos can be found at wegrowcorn.com Unit 1.

- Kernels of Knowledge Video: Meet Farmer Brad McCauley (2:36)
- Kernels of Knowledge Video: Meet Farmer Steve Rome (1:44)

Activity

Throughout the “We Grow Corn!” book, readers learn about the process of growing corn. When looking at the growth cycle of corn, there are many stages farmers watch. Four main growth stages will be discussed in this activity: seed, sprout, plant, and ear of corn. The end product should look similar to this picture with the materials provided:



Instructions

1. Lay out all supplies and place card of the growing stage boxes in front.
2. Seed: take a brown rectangle piece which represents the dirt. Optional: You can use scissors to change the way the top of the dirt looks. Glue to bottom of that box.
3. Glue two kernels on top of dirt to represent the planting process.
4. Sprout: take second brown rectangle (dirt) and do the same with the sprout box. Take the two sprout stickers and place above the dirt to reflect that they are emerging from the ground.
5. Plant: take third brown rectangle (dirt) and do the same as previous boxes. Color or draw a picture of what a corn plant looks like in late summer. See page 12 for an example.
6. Ear of Corn: place the two brown leaf cutouts in the box like they are wings, these represent husk. Take corn kernels and glue them between the husk to create an ear of corn.

At wegrowcorn.com, you can find an instruction video that can be used to guide readers through the activity.

Explanation

Describe the four stages:

Seed: Seeds, also called kernels, are planted in the ground using a planter. A planter will plant around 30,000 seeds in an area the size of a football field. You can ask the readers how long it would take them to plant that many seeds by hand. Farmers need equipment like tractors and planters to be able to put seeds in the ground faster. The planter also makes sure to put seeds in the ground with the right amount of spacing and depth: around 6 inches apart and 2 inches deep with 30 inches between rows (pages 6-7 show these details). The seed then will sit in the ground until it germinates. The warmer the ground, the sooner you will see the seed emerge from the ground as a sprout.

Sprout: The little leaves that start to come out of the ground are called sprouts. The farmer wants all the sprouts to come out of the ground around the same time. This is why when you drive by a field a week after corn has been planted you will see a perfect line of little green plants. A sprout is the first sign of success that the plant is off to a good start.

Plant: During the summer, the plant will need sunlight, water, and nutrients from the soil to keep growing. By late summer, the farmer hopes to have a tall corn plant with 1-2 ears of corns on each plant. A corn plant can get as tall as a basketball goal.

Ear of Corn: At harvest, the corn plant has died and the kernels on the ear of corn have dried. The farmers need the corn to be dry so that it can be used to feed livestock and make fuel. The type of corn grown in Kansas is field corn which is a grain. This is the final stage of the corn growth stage. A combine rips the ear of corn off the plant and separates the kernels from the cob and then the millions of corn kernels are taken to a place where it will be used. What the reader needs to understand at this stage is that the one seed (kernel) that was put into the ground during the first stage will become 800 seeds/kernels.

Online Challenge

A breakout box challenge is a fun way to test the reader on what they learned. This can be done as a group or individually if they have their own technology device. To find the challenge visit wegrowcorn.com Unit 1. Answer key on page 61.

Extension Activity/TEACH-FLEX Lesson

To keep the conversation going about corn, here is an additional activity/lesson that can be used in the library or encourage your students to complete at home. All lessons use common products found at home. Watch the video of a Kansas teacher reading “From Kernel to Corn” by Robin Nelson. Available at wegrowcorn.com.

- [Kreative Kernels | KS Corn](#) (Includes “From Kernel to Corn” By Robin Nelson)