

Lesson 3: Wheat Has Friends

Grade Level: 1st Grade

Time: 60 minutes (with additional days for germination observation)

Subjects: ELA, Science

Overview: This lesson is Lesson 3 of 5 in the *Celebrate Wheat* unit within the Growing Readers micro-curriculum, based on a series of books written by Kansas author Dan Yunk. In this lesson, students engage in a purposeful reread to deepen their understanding of how wheat grows and becomes food, then expand their learning to include other major Kansas crops: corn, soybeans, sorghum, and sunflowers. Students examine real seeds, record observations through drawing and writing, and compare similarities and differences across crops. First graders apply explicit instruction in phoneme segmentation, conventional spelling, comma use in series, and sentence features, while integrating science concepts related to germination. Students conclude by creating a “farm in a glove” model to observe seed sprouting and connect their learning to agriculture in Kansas. Connections to *The Soil Neighborhood* are revisited as students explore how soil nutrients support plant growth beyond germination.

Skillset: Activating and connecting prior knowledge across units, seed observation and comparison, oral language and vocabulary, descriptive language, book orientation knowledge, reading terminology, sentence features, phoneme segmentation of single-syllable words, conventional spelling with common patterns, commas in a series, informative drawing and writing, germination understanding, and agricultural awareness across Kansas crops.

Kansas Academic Standards

Kansas ELA Standards

W.1.10.a Correctly produce upper- and lowercase letters.

W.1.11.c Use commas in dates and to separate single words in a series.

W.1.11.d Use conventional spelling for words with common spelling patterns (e.g., floss rule) and for frequently occurring irregular words.

RF.1.1.a Demonstrate book orientation knowledge.

RF.1.1.b Have an understanding of important reading terminology (e.g., word(s), letter(s), beginning of sentence, top of the page, bottom of the page).

RF.1.1.c Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

RF.1.2.d Orally segment single-syllable words into their complete sequence of individual phonemes.

Science Standards

1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

National Agriculture Literacy Outcomes

Plants and Animals for Food, Fiber, and Energy

T2.K-2.a Describe how plants are grown and used for food.

T2.K-2.e Identify the importance of natural resources (e.g., sun, soil, water) in farming.

T4.K-2.a Describe how farmers use tools and equipment to plant, grow, and harvest crops.

Objectives

Science Objectives

Students will be able to:

- Recognize that wheat, corn, soybeans, sorghum, and sunflowers all begin as seeds.
- Compare and contrast the similarities and differences among seeds.
- explain that seeds need water, air, and warmth to begin growing.
- Describe germination as the process of a seed sprouting.
- Observe evidence that different seeds sprout at different rates.
- Connect the role of healthy soil and the soil helpers from *The Soil Neighborhood* to what a plant needs once it begins to grow.

English Language Arts Objectives

Students will be able to:

- Demonstrate book-orientation knowledge, including the front cover, back cover, title page, and directionality.
- Apply reading terminology: word, letter, beginning of sentence, top of page, bottom of page.
- Distinguish the features of a sentence: first word capitalization and ending punctuation.
- Orally segment single-syllable words into their complete sequence of individual phonemes.
- Print upper- and lowercase letters correctly.
- Incorporate commas to separate single words in a series in written work.
- Apply conventional spelling for words with common spelling patterns and frequently occurring irregular words.

Materials Needed

- Book: *Celebrate Wheat* by Dan Yunk
- Seed Scientist Observation Sheet, provided below (one per student)
- Seed Reference Card, provided below (one per student)
- Labeled food service gloves, teacher labels before lesson (one per student)
- Masking tape strips, for student name labels (one per student)
- Student markers or pencils
- Cotton balls (5 per student)
- Small bowls of water (one per group)
- Soybean, wheat, corn, sorghum, and sunflower seeds (one of each per student)
- Tape, to secure gloves
- Simple map of Kansas

Lesson Procedures

1. Activating Prior Knowledge
 - a. Gather students and explain: *"In our last lesson, you planted your own wheat seed in a cup, just like farmers do. Today, we are going to read Celebrate Wheat*

- again. This time, we are listening very carefully because we want to connect what we planted to what happens to wheat as it grows and becomes food.”
- b. Explain the purpose of a second read: “Good readers read books more than once. The first time we read to understand the story. The second time, we read to listen for new details and important information.”
 - c. Ask students:
 - “What did you plant in your cup?”
 - “What did your wheat seed need to start growing?”
 - “Who planted wheat in our story?”
 - d. Bridge to *The Soil Neighborhood*: “We also know from *The Soil Neighborhood* that healthy soil is full of helpers. Once a seed sprouts and grows roots, those soil helpers give the plant nutrients it needs to keep growing. Today, as we listen to the story again, think about all the things working together to help wheat grow — sun, water, and the soil neighborhood underground.”
2. Purposeful Second Read-Aloud
- a. Set a listening purpose: “While I read today, listen for what happens to wheat after it is planted and how it becomes the food we eat.”
 - b. Read *Celebrate Wheat* aloud. Pause at key pages to:
 - highlight illustrations,
 - clarify vocabulary (seed, wheat, farmer, harvest, flour),
 - connect the text to the students’ planting experience.
 - c. Ask students during reading:
 - “What does the wheat look like when it first starts growing?”
 - “What helps the wheat grow taller?”
 - “What do farmers use to harvest the wheat?”
 - “What food does wheat turn into in the story?”
 - d. After reading, ask students:
 - “How is the wheat in the story like the seed you planted?”
 - “What happens to wheat after farmers harvest it?”
 - “Why do you think wheat is important to people?”
3. Transition from Wheat to Other Crops
- a. Prompt: “We have been learning a lot about wheat. You planted a wheat seed, and in the story we learned how wheat grows and becomes food.”
 - b. Pause and ask: “Do Kansas farmers only plant wheat?”
 - c. Explain to students: “Kansas farmers plant wheat, but they also plant many other crops. Crops are plants that farmers grow to make food and other things that people need.”
 - d. Show the wheat, soybean, corn, sorghum, and sunflower seeds.
 - e. Explain to students: “Just like wheat, Kansas farmers plant these seeds to produce different crops.”
 - f. Ask students:
 - “Do these seeds look the same or different?”
 - “What do you notice when you look at them?”
 - “What crops do you think these seeds will grow into?”
 - g. Explain to students: “Today, we are going to be seed scientists. Scientists look closely at details and record what they notice. You are going to draw and write about each seed on your Seed Scientist Observation Sheet.”
4. Seed Examination (Hands-On Investigation)

- a. Seed Identification — Teacher Introduction: Before distributing seeds, hold up each seed one at a time and introduce it clearly. Display each seed at the front of the room or under a document camera so that all students can see it.
- b. Say for each seed:
 - *“This small, tan seed is wheat. Wheat is the crop we read about in our story. It grows in big fields across Kansas.”*
 - *“This large, yellow seed is corn. Corn grows tall on stalks. You might have seen corn fields on a drive through Kansas.”*
 - *“This small, round, tan seed is a soybean. Soybeans are used to make cooking oil and animal feed.”*
 - *“This small, reddish seed is sorghum. Sorghum looks a little like wheat but is smaller and more round.”*
 - *“This long, striped seed is a sunflower seed. Sunflowers grow tall with bright yellow petals.”*
- c. Distribute the Seed Scientist Observation Sheet and Seed Reference Card to each student. Explain: *“This card shows you what each seed looks like and tells you its name. You can use it while you work on your Seed Scientist Observation Sheet to help you identify and spell the name of each seed.”*
- d. Distribute a set of seeds to each student (wheat, corn, soybean, sorghum, and sunflower). Ensure each student has their own seeds, a copy of the Seed Scientist Observation Sheet, and the Seed Reference Card.
- e. Explain to students: *“Each of you has your own seeds to look at closely. Scientists observe and record what they notice. You will draw and write about each seed on your Seed Scientist Observation Sheet.”*
- f. Remind students of expectations:
 - *“We use our eyes to look closely.”*
 - *“We do not put seeds in our mouths.”*
 - *“We handle them gently.”*
- g. Explain to students: *“For each seed, you will draw what you observe in the drawing space. Then, you will write your own describing word — think about what you see and choose a word that best describes the seed. Next, you will use the phoneme boxes to segment your word into individual sounds. Finally, you will write two informative sentences: the first names the seed and describes it, and the second tells what it looks like.”*
- h. Model expectations using one seed (wheat):
 - Hold up a wheat seed and say: *“Watch how I look closely. I notice the seed is small and tan. That is my describing word: tan. Now I will use the phoneme boxes to segment it: /t/ ... /a/ ... /n/ — three phonemes. I mark one box for each sound. Then I write my two informative sentences: The wheat seed is tan. It looks small and hard.”*
- i. Explain to students: *“Before I write the word tan, I am going to segment it — that means I am going to say every individual sound in the word, one at a time. Watch: /t/ ... /a/ ... /n/. Three sounds. Now I write one letter for each sound: t-a-n. Let’s try another one together. The word big: /b/ ... /i/ ... /g/. Three sounds. What letters would we write?”*
- j. Explain to students: *“Some of these words follow a spelling pattern called the floss rule. When a one-syllable word ends in f, l, or s after a short vowel, we double the last letter. The word tall follows this rule: t-a-l-l. The word will: w-i-l-l.”*

Let's look at our seed words and notice which ones follow other spelling patterns we know."

Differentiation note: For students who need additional support, provide a list of descriptive words on a separate card at the teacher's discretion, or allow the student to whisper their word to the teacher for confirmation before writing. For students ready for a challenge, prompt them to write a third sentence that uses a comparison word (e.g., "The wheat seed is smaller than the corn seed.").

- k. Guide students through one seed at a time. Allow students to hold and examine their own seed while completing the matching section on their worksheet.
 - l. Provide structured prompts while students are working:
 - *"Is your seed big or little?"*
 - *"What color do you see?"*
 - *"What word would you use to describe this seed? Think of your own word."*
 - *"Say your describing word slowly and tap each phoneme before writing it in the boxes. Then write both informative sentences."*
 - m. Encourage students to say their sentence aloud before writing it.
 - n. As students work, the teacher circulates and explicitly supports:
 - *Phoneme segmentation before writing*
 - *Correct letter formation, upper- and lowercase*
 - *Conventional spelling of known patterns*
 - *Correct letter spacing*
 - *Two-sentence informative writing: first sentence names and describes the seed; second sentence describes what it looks like*
 - *Capitalization and end punctuation in both sentences*
 - o. After students complete all five sections, guide them to the Compare section at the bottom of the page, which includes the comma-in-a-series line and the open-ended comparison sentences.
 - p. Explain to students: (connects to the Compare section of the Seed Scientist Observation Sheet): *"When we name more than two things in a row, we use commas to separate them. Look at this example: 'I planted wheat, corn, and soybeans.' The commas go between each item in the list. Let's try it together: which seeds did we look at today? 'We looked at wheat, corn, soybeans, sorghum, and sunflowers.' Count the commas with me."*
 - q. Ask students:
 - *"Which seed was the biggest?"*
 - *"Which seed was the smallest?"*
 - *"Did any of your seeds look the same?"*
 - *"How were the seeds different?"*
 - r. Explain to students: *"Even though these seeds look different, Kansas farmers plant all of them. Each seed can grow into a different crop."*
5. Seed Sprouting Activity — Farm in a Glove
- a. Prompt: *"We just looked closely at seeds from different Kansas crops. All of these seeds can grow into plants."*
 - b. Ask students:
 - *"What do farmers do first if they want to grow a crop?" (plant a seed)*
 - *"What do you think a seed needs to start growing?"*

- c. Explain to students: *"When a seed starts to grow, we say it sprouts. Germination is the scientific word for a seed beginning to grow, or sprout. Today, we are going to help our seeds germinate by giving them what they need, just like farmers do."*
- d. Ask students, *"What do seeds need to start growing?"*
- e. Guide students to identify:
 - *Water*
 - *Air*
 - *Warmth*
- f. Explain to students: *"When the seed grows bigger, it will also need light and nutrients from the soil. Remember the helpers in the soil neighborhood? Once roots form, those helpers get to work providing nutrients to help the plant grow strong. Right now, we are just helping the seed start."*
- g. Show a glove and say: *"We are going to make a tiny farm with our seeds — a farm in a glove. Each finger of the glove will hold a different seed. The glove helps us watch how seeds sprout."*
- h. Explain to students: *"I have already written the name of each seed on the fingers of your glove so you can match your seed to the correct finger." Hold up a sample glove with fingers labeled: wheat, corn, soybean, sorghum, sunflower.*
- i. Model each step slowly while students watch before distributing materials:
 - *Show the labeled glove.*
 - *Place a strip of masking tape across the palm of the glove.*
 - *Write your name on the masking tape.*
- j. Explain to students, *"You will write your name on masking tape and stick it to your glove so we know which glove belongs to you."*
- k. Dip a cotton ball in water and gently squeeze it so it is wet but not dripping.
- l. Hold up one seed and identify it clearly:
 - *"This small tan seed is wheat."*
 - *"This big yellow seed is corn."*
- m. Briefly review visual characteristics to help students identify their seeds.
- n. Place one seed on the cotton ball, then put the cotton ball into the matching labeled finger of the glove.
- o. Say aloud what you are doing:
 - *"I am putting the wheat seed on the wet cotton ball."*
 - *"I am matching the wheat seed to the finger that says wheat."*
 - *"The water will help the seed sprout."*
- p. Distribute labeled gloves, masking tape strips, markers, cotton balls, water bowls, and seeds.
- q. Support students as they:
 - *Write their names on masking tape and attach it to their glove.*
 - *Dip and squeeze cotton balls.*
 - *Place the correct seed on each cotton ball.*
 - *Match the seed to the labeled glove finger.*
- r. Use oral language prompts:
 - *"I put the seed in the glove."*
 - *"My seed is on the wet cotton ball."*
 - *"This seed needs water to grow."*
 - *"I matched the corn seed to the finger that says corn."*
- s. After students finish putting seeds in the gloves, help them fold down the glove opening and secure it with tape.

- t. Hang gloves with fingers pointing downward.
 - u. Explain to students: *"We do not need to add more water. The cotton ball has enough water for the seed to start growing."*
6. Prediction & Discussion
- a. Ask students:
 - *"What do you think will happen to the seeds?"*
 - *"Which seed do you think will sprout first?"*
 - *"Will all of the seeds look the same when they sprout?"*
 - b. Explain to students: *"We will watch our seeds over the next few days and see how they change. Scientists make predictions and then observe to see if they were right."*
7. Discussion & Reflection
- a. Gather students near the hanging gloves.
 - b. Ask students:
 - *"What did we learn today about seeds?"*
 - *"What does a seed need to start growing?"*
 - *"What was different about the seeds we looked at?"*
 - *"How are the seeds we looked at the same?"*
 - c. Guide students to reflect on the germination activity:
 - *"Why did we put the seeds on wet cotton balls?"*
 - *"Why did we match each seed to the correct finger on the glove?"*
 - *"What do you think will happen inside the seed first?"*
 - d. Reinforce vocabulary and explain to students: *"Today we learned that when a seed starts to grow, it sprouts. The big science word for sprouting is germination. In our book Celebrate Wheat, Grandma told Kailey that wheat starts as a seed. Today, we helped wheat — and other crops — begin that same process."*

8. Kansas Connection

- a. Display a simple map of Kansas.
- b. Explain to students: *"We live in Kansas, and Kansas is a farming state. Farmers in Kansas plant many crops."*
- c. Review the five crops from the lesson and briefly explain what each is used for:
 - Wheat – flour for bread, pasta, and pizza crust
 - Corn – eaten by people; used to feed livestock
 - Soybeans – cooking oil, animal feed, and many food products
 - Sorghum – ground into flour, made into molasses syrup, and used as animal feed
 - Sunflowers – seeds for snacks and sunflower oil
- d. Kansas Connection:

Kansas Connection — Teacher Script: *"The seeds you held today — wheat, corn, soybeans, sorghum, and sunflowers — are not just classroom materials. They are the same seeds that Kansas farmers plant in their fields every year. In Kansas, those fields stretch as far as you can see. Some of you have driven past them, or maybe you've helped plant a garden at home or on your family's land and know what it feels like to put a seed in the ground. Others of you might not have thought much about where seeds come from before today, and that is okay — because now you do. Every loaf of bread, every bag of chips, every bottle of cooking oil has a seed story behind it, and a lot of those stories start right here in*

Kansas. The farmers who grow these crops work hard every season — planting, caring for the land, and harvesting so that people everywhere have food to eat. The steps you practiced in your glove—planting seeds and helping them grow—are the same steps farmers use to grow crops, only on a much bigger scale.”

e. Ask students:

- *“Have you ever seen fields of corn or wheat when you are driving?”*
- *“Has anyone seen sunflowers growing?”*
- *“Do you know someone who is a farmer or rancher? What types of crops or livestock do they grow?”*
- *“How does germinating your own seeds help you understand what farmers do?”*

Assessment: Student understanding is assessed through ongoing formative observation throughout the lesson, including participation in the purposeful reread and discussion, completion of the Seed Scientist Observation Sheet, accurate seed identification and comparison, engagement in the seed sprouting activity, and application of foundational literacy skills including phoneme segmentation of single-syllable words, conventional spelling of common patterns, correct use of commas in a series, and proper letter formation. The teacher should note whether students can independently segment words into phonemes before writing, apply the FOSS rule and other spelling patterns, and construct written sentences that use correct capitalization and punctuation. Students who make unprompted connections to *The Soil Neighborhood* demonstrate meaningful cross-unit learning transfer and should be noted.

Supplemental Activities: Germination Observation Journal — Ongoing Compare and Contrast: Over the days following this lesson, give students regular opportunities to observe their farm-in-a-glove and record what they notice. In each observation session, students choose two seeds from their glove, draw them side by side, and write one describing word beneath each drawing. Students then respond independently to two prompts: “How are these two seeds the same right now?” and “How are they different?” The expectation is independent writing — students compose their own sentences rather than copying frames, applying phoneme segmentation and conventional spelling, and using sentence conventions practiced in this lesson. Because seeds germinate at different rates, the compare-and-contrast observations will naturally change from day to day, giving students authentic, ever-changing material to describe. Returning to the same two seeds across multiple observations builds sequencing and scientific thinking as students begin to see change over time. Prompt students to apply commas in a series when listing what they observe (e.g., “The corn seed has a root, a stem, and a leaf.”).

Differentiation note: For students who need additional support, sentence stems may be provided at the teacher's discretion. For students ready for a challenge, prompt them to write two or three sentences per observation, incorporating comparison language (same, different, both) and a comma series.

Author: Kelsy Sproul, Literacy Specialist, 2026 KFAC Teacher of the Year, KFAC Curriculum Advisory Council, Former Elementary Teacher. Edited by Marissa Cook, KFAC intern, Kansas State University Secondary Education.

Seed Reference Card



Wheat



Corn



Soybean



Sunflower



Sorghum

Name: _____ Date: _____

Seed Scientist Observation Sheet

1. Look closely at each seed.
2. Draw the seed.
3. Write your own describing word
4. Segment the word into phonemes using the boxes
5. Write two informative sentences.

Wheat

1. Draw:

2. My describing word:

3. Segment it:

--	--	--	--	--	--	--	--	--	--

4. Write two informative sentences.

The wheat seed is _____.

It looks _____.

Corn

1. Draw:

2. My describing word:

3. Segment it:

--	--	--	--	--	--	--	--	--	--

4. Write two informative sentences.

The corn seed is _____.

It looks _____.

Soybeans

1. Draw:

2. My describing word:

3. Segment it:

--	--	--	--	--	--	--	--	--	--

4. Write two informative sentences.

The soybean seed is _____.

It looks _____.

Sorghum

1. Draw:

2. My describing word:

3. Segment it:

--	--	--	--	--	--	--	--	--

4. Write two informative sentences.

The sorghum seed is _____.

It looks _____.

Sunflower

1. Draw:

2. My describing word:

3. Segment it:

--	--	--	--	--	--	--	--	--

4. Write two informative sentences.

The sunflower seed is _____.

It looks _____.

Compare the seeds!

1. Commas in a series (W.1.11.c) - Write all five seeds separated by commas:

The seeds I observed were:

_____, _____, _____,
_____, and _____.

2. Circle the BIGGEST seed:

wheat corn soybean sorghum sunflower

3. Circle the SMALLEST seed:

wheat corn soybean sorghum sunflower

4. Write two sentences comparing the seeds. Use the words same, different, or both.
