

## LESSON PLAN

# Bowers Farm

## Connecting People to the Food They Eat

### Lesson Overview:

This lesson encourages students to explore how farms connect to nature and the food they consume every day. Using Bowers Farm as an example, students will learn about sustainable farming practices and how an attitude of respect for land and animals creates a balanced farming environment. This environment better reflects an eco-friendly system which produces food that's good to eat, and a farming habitat that feeds the soul of a community who, through outreach and education, are invited to participate in learning about the farm.

### Essential Learning Goal

**How can the story of Bowers Farm change how people view farming?**

### Lesson Progression:

#### STEP 1 – BRAINSTORMING ACTIVITY

- The teacher will introduce the lesson by asking students, “What do you think of when you hear the word farm?” The teacher has a couple of options in how to engage students in their responses. Because it is important to see a progression of knowledge from the beginning of the lesson to the end, student responses should be recorded and saved.
- If students have access to personal devices their responses can be recorded using Padlet. Padlet is an application to create an online bulletin board that can be used to display information for any topic. Padlet is a free service for teachers. A link is provided in the Resource Section. A second option would be to write the prompt on butcher paper and have students write their responses to the question on sticky notes, attaching their responses under the question. One benefit to this option is the physical movement of students which encourages participation and allows them to become actively involved in the lesson.
- The teacher will go over the responses to the prompt as a whole class activity.

#### STEP 2 – SMALL GROUP ACTIVITY

- The teacher will divide the class into seven groups to correspond to the seven videos. Each group will be given a series of guided questions that are specific to the video assigned to the group.
- The teacher will show each video to the class as a whole. When the assigned group video is broadcast, the group will be expected to take notes on the video using their questions as a guide to help groups focus on the important aspects of the video.

- After the class has viewed each video, individual groups may use their personal devices to review the video specifically assigned to their group in their group setting, making sure the questions are answered adequately and to the satisfaction of each member of the group.
- Each group will create three slides that will be combined with other group slides to create a cohesive story of the Bowers Farm. Slides 1 and 2 should answer the first 5 guided questions. It is important that it not be done as a question and answer on the slides, but that the slides should tell a story incorporating the 6 guided learning questions into the story.
- The third slide should be devoted to answering the essential question - **How can the “story” of Bowers’ Farm change how people view farming?** Again, the slide must be done creatively, and not presented as a simple question/answer format.
- Students/groups will be given rubrics beforehand so that they know the criteria on which they will be evaluated by their peers and by the teacher.
- Each group will present their three slides to the class.
- To ensure that full attention is given to the presentation each student will be asked to evaluate the slides of other groups using a peer evaluation form. This form will be used to add points to group presentations. The teacher will average the scores on all peer evaluation forms to determine how the class evaluated a particular presentation. The maximum number of extra points a group can receive is three points.

## Guided Questions for Each Group

### FARM ANIMALS

- » Why do the Bowers have multi-species livestock on their farm?
- » What is multi-species livestock?
- » How does the Bowers Farm use nature as part of their farming practices?
- » What makes an animal that grazes distinct from other animals on the farm?
- » If the animals could speak, how would they tell the story of the Bowers Farm?
- » How can the “story” of Bowers’ Farm change how people view farming?

### WELCOME TO THE FARM, CHIEF

- » What is a livestock guardian dog’s job?
- » How did Chief’s natural abilities benefit the farm?
- » What type of training would be required to teach a dog to be a livestock guardian?
- » Why would it be appropriate to call Chief a “uniter”?
- » If Chief could speak, how would he tell the story of the Bowers Farm?
- » How can the “story” of Bowers’ Farm change how people view farming?

### FARM CAMP

- » Why do the Bowers feel it is so important that everyone be included in their outreach?
- » Why is education about farming so important?
- » What does it mean to think like a farmer?

- » What importance do food, water, and shelter have on a farm?
- » How would children and those who participate in Farm Camp tell the story of Bowers Farm?
- » How can the “story” of Bowers’ Farm change how people view farming?

### **FAMILY**

- » How is farming a family activity?
- » What are some of the chores the little girl does with her family to help support the farm?
- » How is the little girl’s life different from a person who lives in the city?
- » How do the parents feel about raising their child on a farm?
- » How would the Bowers family tell the story of their farm?
- » How can the “story” of Bowers’ Farm change how people view farming?

### **FARM TO TABLE**

- » Why is it important to understand where the food on your table comes from?
- » Why is it important to support local farmers?
- » Why is there a cost difference in purchasing produce from a local farmer over produce in grocery store?
- » How does Farmer Brandon define respect in connection with his farm?
- » If nature could speak, how would the crops, and the earth the crops are grown in, tell the story of the Bowers Farm?
- » How can the “story” of Bowers’ Farm change how people view farming?

### **FARMER BRANDON**

- » Farmer Brandon did not go to college to become a farmer. Yet, he is successful. What are some of the qualities that make him a successful farmer?
- » Why does Farmer Brandon describe farming as a “calling”?
- » What does Farmer Brandon mean when he talks about being a mentor?
- » How does Farmer Brandon help his community?
- » How would Farmer Brandon tell the story of his farm?
- » How can the “story” of Bowers’ Farm change how people view farming?

### **FARMER SARAH**

- » How can children educate their families and change perceptions about farming?
- » How is the type of farming done by the Bowers beneficial to the earth, animals, and people?
- » Why does Farmer Sarah feel it is important that farming be accessible to all?
- » What does Farmer Sarah find so cool about living on the farm?
- » How would Farmer Sarah tell the story of her farm?
- » How can the “story” of Bowers’ Farm change how people view farming?

## Lesson Extensions

- Create a virtual farm scenario for students/groups. Distribute a worksheet with a virtual farm scenario. The scenario could involve limited water supply, a sudden change in weather, baby animals being born or a pest problem. Students will need to read the scenario and brainstorm solutions using their “farmer thinking” skills.
- Divide the students into small groups. Introduce the key stages of the farming cycle: planting, growing, harvesting, and transportation to market. Provide each group with markers/crayons and butcher paper. Ask them to illustrate one stage of the farming cycle on their assigned section of the paper. Encourage them to include details specific to that stage, (e.g., planting: seeds, soil, tools; growing: sun, water, plants, etc.). After each group finishes, tape the sections of the butcher paper together to create a large mural depicting the entire farming cycle. Lead a discussion about the mural, asking each group to explain their assigned stage and how it connects to the others.
- Incorporate vocabulary into the multimedia slides presented to the class for the final group project. Create links with the terms that will give the reader of the slide definitions of the terms and more information.
- Create an “art” slide that tells a story of Bowers Farm. Just as “Cave Art” depicted the life of an early man, what symbols, emojis, or pictures could you put on a slide that would help the person viewing the slide understand a particular aspect of farming life? The pictures must relate to the video assigned. Emojis are in many ways an old language that has been adapted to a new technology. How would your “created pictures/emojis” depict farming life on Bowers Farm?
- Create a puzzle using the vocabulary words. Links are provided in the resources.

# Bowers Farm

### VIDEO TERMS

1. **Agriculture** – the science and work of raising crops and farm animals; farming.
2. **Brooder** – a heated structure in which young chickens or other birds are raised.
3. **Captivity** – the state of being held or confined.
4. **Chief** – The Bowers' pet dog who was trained for a specific purpose. Chief is a Great Pyrenees who was trained by the Bowers family to guard and protect the livestock on their farm.
5. **Chicks** – a bird that has just hatched or a young bird, especially a young chicken.
6. **Chores** – a routine task around the house or yard.
7. **Colonies of Animals** – a group of animals of the same species that live and interact closely with each other.
8. **Connection** – an association or relationship. Anything that links or bonds.
9. **Cost** – the price paid to acquire, produce, accomplish, or maintain anything.
10. **Cycle** – a circle of events that repeats in a regular pattern.
11. **Deliveries** – an act of bringing or sending something to a particular person or place.
12. **Education** – the act or work of learning or training.
13. **Economics** – the study of how goods and services are produced and distributed.
14. **Ecosystem** – a system that includes all living organisms in an area as well as its physical environment functioning together as a unit.
15. **Farm** – a tract of land, usually with a house, barn, silo, etc., on which crops and often livestock are raised for livelihood.
16. **Farm Camp** – a periodic activity done in association with Bowers Farm and the Bowers family. Participants learn what is done on the farm, become actively involved in farming activities, and gain a respect for farming life and the land. Children and community members leave the camp with an appreciation of what it means to be a farmer and where and how we obtain our food.
17. **Farm to Table** – the idea that food on our table comes directly from a specific farm without going through a store.
18. **Food – Water – Shelter** – Basic needs of survival for people and animals as well as points of importance in learning how a farmer thinks and understanding what farm animals need.
19. **Grazer** – an animal that feeds on growing grass and pasturage, as in cattle, sheep, etc.
20. **Guardian** – a person or animal who guards and protects.
21. **Hard worker** – a person who consistently puts in a lot of effort into their work, either physically, mentally, or emotionally.
22. **Household** – the group of people, such as a family, that lives in a particular house.
23. **Interact** – to respond to one another in a social situation.
24. **Livelihood** – means of earning or getting what is needed to live.
25. **Livestock** – the horses, cattle, sheep, and other useful animals kept or raised on a farm or ranch.
26. **Livestock Guardian Dog** – a dog bred for the purpose of protecting livestock from predators.
27. **Local** – pertaining to a city, town, or small district rather than an entire state or country.
28. **Mentor** – someone who teaches or guides another, often younger person.
29. **Multi-species** – referring to more than one species of animal who live in a common environment.
30. **Natural Abilities** – skills that make certain tasks or activities easy to complete, and that require less time, effort, or energy to perform.

31. **Natural Instinct** – an inborn impulse or motivation to act in a particular way without prior knowledge or learning.
32. **Nature** – the physical world and living things in their natural state; all things that are not made by people.
33. **On-Pasture** – term referring to putting animals in a pasture to graze.
34. **Outreach** – activity that brings services and programs to a community.
35. **Passion** – any strong feeling or emotion.
36. **Pasture** – land covered with grass and other low plants suitable for grazing animals.
37. **Predator** – an animal that hunts other animals for food.
38. **Problem Solver** – a person who works to identify a problem, determine the cause of the problem, generates new ideas to solve the problem, and implements and evaluates a solution to the situation.
39. **Profit** – the amount of money made by a business that is more than the amount put in at the start or paid out as expenses.
40. **Qualifications** – something that makes a person fit for an activity or job.
41. **Respect** – the state or condition of being thought of with honor or admiration.
42. **Root** – to pull, tear, or dig up.
43. **Scratch** – to dig, scrape or tear with nails or claws.
44. **Shovel** – an implement used for taking up, removing, or throwing loose matter, as earth.
45. **Smolder** – to burn slowly and with smoke, but with little or no flame.
46. **Steward of the Land** – one who cares for and protects the land over a long period of time, often passing the promise down through generations.
47. **Support** – to encourage, comfort, help, sustain, etc.
48. **Sustainable** – capable of continuing or being kept up over time.
49. **Unite** – to join together.
50. **Worm Farm** – a compost bin that uses worms to break down food waste into compost.

# Bowers Farm

## SC ELA Standards – Grade 4

### APPLICATIONS OF READING (AOR)

ELA.AOR.7: Determine or clarify the meaning of unknown and multiple-meaning words and phrases.

ELA.4.AOR.7.1 Determine or clarify the meaning of known, unknown, and multiple meaning words and phrases, choosing from an array of strategies:

- » a. use context clues (e.g., definitions, examples, restatements) to determine the meaning of a word or phrase;
- » b. consult print and digital reference materials to build and integrate background knowledge; and
- » c. consult print and digital reference materials to find the pronunciation, part of speech, and to determine or clarify the precise meaning of words and phrases.

Indicator Insight: ELA.4.AOR.7.1a Refer to the Vocabulary Support Document for context clues insight

ELA.AOR.8: Analyze word relationships and nuances in word meanings within literary and informational texts.

ELA.4.AOR.8.1 Determine an author's use of words and phrases in grade-level literary, informational, and multimedia texts:

- » distinguish between literal and nonliteral meanings of words and phrases (e.g., take steps);
- » b. explain the meaning of commonly occurring similes, metaphors, and idioms, and
- » c. demonstrate knowledge of relationships between words (e.g., synonyms and antonyms) to better understand each of the words

Indicator Insight: d. ELA.4.AOR.8.1 Refer to ELA.4.AOR.1.2 for the types of figurative language students are expected to know at this grade level.

**ELA.AOR.10: Evaluate and critique multimedia presentations of a text or subject, including their impact on an audience.**

ELA.4.AOR.10.1 Determine and explain how visuals (e.g., illustrations, photographs, maps) and/or multimedia elements (e.g., video, audio) contribute to the meaning of a print or non-print text.

Indicator Insight: none

### RESEARCH(R)

ELA.R.1: Use critical thinking skills to investigate, evaluate, and synthesize a variety of sources to obtain and refine knowledge.

ELA.4.R.1.3 Determine which information is relevant to the topic.

ELA.4.R.1.4 Group related findings

Indicator Insights: ELA.4.R.1.1 Refer to the Research Support Document for research support. ELA.4.R.1.5 Refer to OE.5 for more information about citing sources.

## **WRITTEN AND ORAL COMMUNICATIONS (C)**

ELA.C.7: Organize and communicate ideas through a range of formats to engage a variety of audiences.

ELA.4.C.7.1 Present information orally to report on a topic or text, tell a story, or recount an experience. When presenting:

- » demonstrate appropriate speaking techniques (e.g., nonverbal cues, appropriate volume, and clear pronunciation) for a variety of purposes and audiences; and
- » b. identify and use appropriate digital tools to enhance verbal communication with support from adults

Indicator Insight: none

ELA.C.9: Evaluate and critique ideas and concepts interactively through listening and speaking.

ELA.4.C.9.1 Identify and explain a speaker's claim(s) and supporting reasons and evidence.

Indicator Insight: none

**PEER RUBRIC**

## Bowers Farm

### Farm Animals

3	2	1	0	STUDENT'S ASSESSMENT
The slides told a story. It was easy to learn about how the Bowers' farm operates from viewing the slides. The essential question was answered completely.	The information on the slides did not tell the story as well. Although information was learned and the essential question was answered, it was harder to follow.	It was difficult to learn about the Bowers' farm from the 3 slides presented. The answer to the essential question was attempted but was incomplete.	The information on the slides was confusing and incomplete. Little or no attempt was made to tell the story of the Bowers' Farm. The essential question was not answered.	

### Welcome to the Farm, Chief

3	2	1	0	STUDENT'S ASSESSMENT
The slides told a story. It was easy to learn about how the Bowers' farm operates from viewing the slides. The essential question was answered completely.	The information on the slides did not tell the story as well. Although information was learned and the essential question was answered, it was harder to follow.	It was difficult to learn about the Bowers' farm from the 3 slides presented. The answer to the essential question was attempted but was incomplete.	The information on the slides was confusing and incomplete. Little or no attempt was made to tell the story of the Bowers' Farm. The essential question was not answered.	

### Farm Camp

3	2	1	0	STUDENT'S ASSESSMENT
The slides told a story. It was easy to learn about how the Bowers' farm operates from viewing the slides. The essential question was answered completely.	The information on the slides did not tell the story as well. Although information was learned and the essential question was answered, it was harder to follow.	It was difficult to learn about the Bowers' farm from the 3 slides presented. The answer to the essential question was attempted but was incomplete.	The information on the slides was confusing and incomplete. Little or no attempt was made to tell the story of the Bowers' Farm. The essential question was not answered.	

Family				
3	2	1	0	STUDENT'S ASSESSMENT
The slides told a story. It was easy to learn about how the Bowers' farm operates from viewing the slides. The essential question was answered completely.	The information on the slides did not tell the story as well. Although information was learned and the essential question was answered, it was harder to follow.	It was difficult to learn about the Bowers' farm from the 3 slides presented. The answer to the essential question was attempted but was incomplete.	The information on the slides was confusing and incomplete. Little or no attempt was made to tell the story of the Bowers' Farm. The essential question was not answered.	

Farm to Table				
3	2	1	0	STUDENT'S ASSESSMENT
The slides told a story. It was easy to learn about how the Bowers' farm operates from viewing the slides. The essential question was answered completely.	The information on the slides did not tell the story as well. Although information was learned and the essential question was answered, it was harder to follow.	It was difficult to learn about the Bowers' farm from the 3 slides presented. The answer to the essential question was attempted but was incomplete.	The information on the slides was confusing and incomplete. Little or no attempt was made to tell the story of the Bowers' Farm. The essential question was not answered.	

Farmer Brandon				
3	2	1	0	STUDENT'S ASSESSMENT
The slides told a story. It was easy to learn about how the Bowers' farm operates from viewing the slides. The essential question was answered completely.	The information on the slides did not tell the story as well. Although information was learned and the essential question was answered, it was harder to follow.	It was difficult to learn about the Bowers' farm from the 3 slides presented. The answer to the essential question was attempted but was incomplete.	The information on the slides was confusing and incomplete. Little or no attempt was made to tell the story of the Bowers' Farm. The essential question was not answered.	

Farmer Sarah				
3	2	1	0	STUDENT'S ASSESSMENT
The slides told a story. It was easy to learn about how the Bowers' farm operates from viewing the slides. The essential question was answered completely.	The information on the slides did not tell the story as well. Although information was learned and the essential question was answered, it was harder to follow.	It was difficult to learn about the Bowers' farm from the 3 slides presented. The answer to the essential question was attempted but was incomplete.	The information on the slides was confusing and incomplete. Little or no attempt was made to tell the story of the Bowers' Farm. The essential question was not answered.	

**RUBRIC**

## Bowers Farm

### Demonstrated learning and understanding

Excellent - <b>5</b>	Very Good - <b>4</b>	Good - <b>3</b>	Satisfactory - <b>2</b>	Unsatisfactory - <b>1</b>	<b>ASSESSMENT</b>
Made strong connections between facts and ideas through images and text. The answers to the guided questions were seamlessly integrated into the story of the Bowers Farm. The viewer easily understood the story the presenter was trying to tell.	Clearly understood the topic well. Made connections between facts and ideas through images and text. However, the answers to the guided questions were not as integrated making it more difficult to understand the story the presenter was trying to tell.	Understood topic. Made some connections between facts and ideas through images and text. However, the guided questions were answered without integration into the story of Bowers Farm creating a choppy, less cohesive presentation.	Followed directions, had a basic knowledge of the topic. Made vague connections between facts and ideas through images and text. Not all of the guided questions were answered, the story of Bowers Farm was not cohesive.	Thinking is not justified; no evidence that knowledge was acquired. Made no connections between facts and ideas through images and text. Few of the guided questions were answered and no effort was made to integrate the questions into the story of Bowers Farm.	

### Essential Question

Excellent - <b>5</b>	Very Good - <b>4</b>	Good - <b>3</b>	Satisfactory - <b>2</b>	Unsatisfactory - <b>1</b>	<b>ASSESSMENT</b>
The answer to the essential question was clearly made evident in the presentation. The viewer sensed the passion the owners had for Bowers Farm and understood how Bowers Farm can change views about farming.	The answer to the essential question was evident. However, the passion felt by the owners of Bowers Farm was not as prominent, making it more difficult to understand how Bowers Farm can change views about farming.	The answer to the essential question was somewhat evident. Little passion about Bowers Farm was shown in the presentation. The viewer would have a difficult time connecting how Bowers Farm can change views about farming.	The answer to the essential question was not easy to understand. Little passion about Bowers Farm was shown in the presentation. The viewer would have a difficult time connecting how Bowers Farm can change views about farming.	The essential question was not answered. Little passion about Bowers Farm was shown in the presentation. No connections could be made on how Bowers Farm could change views about farming.	

### Slide Presentation

Excellent - <b>5</b>	Very Good - <b>4</b>	Good - <b>3</b>	Satisfactory - <b>2</b>	Unsatisfactory - <b>1</b>	<b>ASSESSMENT</b>
Neat and orderly, easy to follow. Guided questions integrated as a story.	Moderately neat, easy to follow. Integration of guided questions is somewhat disjointed.	Somewhat neat, not as easy to follow. Integration of guided questions is somewhat disjointed.	The information is distracting and difficult to follow. Integration of guided questions is disjointed.	Lacks neatness and orderliness. Hard to understand. The guided questions are not integrated into the story of Bowers Farm.	

### Creativity

Excellent - <b>5</b>	Very Good - <b>4</b>	Good - <b>3</b>	Satisfactory - <b>2</b>	Unsatisfactory - <b>1</b>	<b>ASSESSMENT</b>
Very clever; creatively designed	Displays creative thinking	Shows some creative thinking	Lacks creativity	No evidence of creative thinking	

### Mechanics

Excellent - <b>5</b>	Very Good - <b>4</b>	Good - <b>3</b>	Satisfactory - <b>2</b>	Unsatisfactory - <b>1</b>	<b>ASSESSMENT</b>
No grammar errors present.	Fewer than 2 grammar errors present.	Occasional errors but not enough to distract.	Distracting errors, difficult to read.	Fragmented sentences and grammar. Very difficult to understand	