



Lesson Plan: Where does food come from? - Agriculture and animal care at Oxon Hill Farm

- Objectives:
 - Students will question where their food comes from and be able to trace an item of food to its source.
 - Students will be able to identify the necessary components of animal care. (Water, food, shelter, enrichment)
 - Students will learn to safely and respectfully interact with live farm animals.
- Curriculum Connections- see Appendix B
- Activities
 - Pre-visit: Food comes from a farm
 - Visit Oxon Hill Farm
 - Chicken feeding and/or cow milking (max. 30 students)
 - Farm tour
 - Storytime
 - How Did That Get in my Lunchbox? - Chris Butterworth
 - On the Farm, At the Market - G. Brian Karas
 - Post-visit: Design a farm

Pre-visit: Food comes from a farm

Animal or Plant? For Pre-k through 3rd grade

(Adapted from [Iowa Agriculture Literacy Foundation, Jan Whaley](#))

- Purpose: Students will learn about the sources of different foods by differentiating between foods originating from plants and foods originating from animals.
- Materials:
 - Index Cards
 - Crayons, colored pencils, markers
 - [Photos](#) or coloring pages of various food
- Background
 - Students will use knowledge of and experience with agriculture to decide where food comes from. Most foods come from either a plant or an animal that was raised on a farm. Some foods (like salt) are minerals that come from the natural world. Other foods, like fish, are sometimes harvested from the wild.
 - In this lesson, students will have to decipher the origination of various foods and sort them into categories based on if they are from plants or animals. Students will be sorting common foods like cheese, fruits and vegetables, apple juice, and chocolate.
 - Minimally processed foods, like fruit and vegetables may be easier to decipher. Fruits and vegetables come from plants. Most of these specialty crops are grown in warm climate areas, like California, where they can grow them year-round.
 - Fruit juices, chocolate, cookies, and bread may be more difficult to decipher. Fruit juices still come from fruits, primarily ones that grow on trees or vines (apples, oranges, grapes). These fruits need pollinators to pollinate the trees flowers so the fruits can form.

- Chocolate comes from the cacao bean, which grows on a tree. This needs a very warm climate, so we purchase cocoa from places like Ghana. Cookies and bread have multiple ingredients. They use wheat flour, milk from cows, oil from soybeans, eggs from chickens, maybe butter also from cows, and other various things. Though wheat may be the principal ingredient, they have ingredients from both plants and animals!
- Students may be aware that meat comes from animals, but that's not the only thing they give us. They also give us dairy products, eggs, and several non-food products, like leather.
- Procedure
 - Open a discussion with students about foods they typically eat in a day or week. Use a classroom white board to list student contributions to the discussion.
 - Be sure to include cheese, clementines, carrots, tomatoes, apple juice, chocolate, and milk. These will be referred to later in class.
 - Ask students where they think these foods came from. Write their responses next to each food on the list. For example, students may state that corn comes from seeds. Keep their responses on display for future reference.
 - Have students use crayons and 5 x 8 blank index cards to draw pictures of each of the foods. If students are able, ask them to include the names of the foods on the pictures.
 - **Optional:** Read the book *How Did That Get In My Lunchbox? The Story of Food* by Chris Butterworth aloud to the class. Allow students time to react to the reading and discuss their ideas regarding the origin of their foods.
 - Were there any foods in the book we did not discuss? If so, add them to the list now.
 - Once the list is updated, ask the students:
 - Remember the cheese in the lunchbox? Where did it start? What were some of the processes that got it from the farm to your sandwich?
 - Cheese is a dairy product that comes from a cow. A cow is milked, and the milk is refrigerated and taken to a cheese plant, where it is cultured and turned into cheese! It is then packaged and sent to stores.
 - What do the clementine, the carrots, and the tomato in the lunchbox have in common?
 - Apple juice still contains a fruit. Where does it come from?
 - Apples grow on trees. Washington state grows the most apples of all of the states. Apples need to be pollinated to form fruit. The apple tree sets flowers in the spring, which get pollinated and then form the fruits. Apples are harvested in the fall.
 - Chocolate beans, clementines, and dairy come from very different parts of the world. What are some reasons why they aren't grown all in the same place?
 - All plants have certain needs. Some plants need to be warm all the time, so they can't live where there are harsh winters. Animals are the same way, and some live better in some climates than others.
 - The cookie in the lunchbox contains milk, eggs, butter, and flour. Do you have any ideas where these ingredients came from?
 - Milk comes from cows that are milked 2-3 times a day. Eggs come from chickens who lay one egg about every day. Butter comes from milk that has been churned, or mixed up a lot. Flour comes from wheat that has been processed to be a fine powder.
 - Tell students to take out their index cards with food pictures. Tell them their mission is to sort the pictures into two stacks: one stack of foods that come from plants, and one stack of foods that come from animals.
 - Give students a few minutes to work. Walk around the room checking for accuracy and answering questions as they arise.
 - Optional: this activity could be a game that the whole class participates in. The attached Animal or Plant Pictures document could be printed and cut apart and groups of students could see who can sort the pictures the fastest and the most accurately.
 - After the sorting activity is complete, recap with the students. What types of foods come from plants?

- Fruits and vegetables come from plants, as well as flour (wheat), vegetable oil (soybeans), and some other things like tofu (soybeans) and almond milk (almonds)
- What types of foods come from animals?
 - Meats come from animals, as well as dairy products, eggs, and honey.

Visit Oxon Hill Farm

RANGER-LED Chicken Feeding/Cow Milking

- Students will learn to safely and respectfully interact with live farm animals.

RANGER-LED Farm Tour

- Students will be able to identify the necessary components of animal care. (Water, food, shelter, enrichment)

(Pre-K-2nd grade) Storytime—*May be teacher or chaperone led*

Purpose: Students will explore where their food comes from and identify the role of the farmer in the production of food.

Procedure

- Ask the students what they ate for breakfast.
- Ask the students where that food comes from? They may say the fridge, grocery store, etc. See if they can tell you where the grocery store gets the food?
- Read *How Did That Get in my Lunchbox* by Chris Butterworth
- If time remains, read *On the Farm, At the Market* by G. Brian Karas

Post-Visit (Evaluation): Design a farm

Purpose: Students will demonstrate the knowledge of where food comes from and what a farmer does to take care of crops and livestock.

Materials:

- Design a farm worksheet (Appendix A)
- Colored pencils, markers, crayons, etc.

Procedure:

1. As a class, review what the students learned during their visit to Oxon Hill Farm.
 - What does a farmer do?
 - What does a farm animal need to survive?
2. Show the class the Design a farm worksheet on the board and tell them that they will be designing their very own farm to make their favorite foods. You will demonstrate an example with pepperoni pizza.
3. Ask the class what ingredients make up pepperoni pizza- pepperoni, cheese, tomato, crust
4. One ingredient at a time, discuss where they come from- pig, cow, tomato plant, wheat plant
5. Show the completed Pepperoni pizza farm (Appendix C) or, for younger students, draw each item on the board and instruct the students to follow along on their own worksheets.
6. Give the students time to design a farm for their own favorite food. (This activity could be taken home to be finished)
7. Discuss what each of your students, as farmers, would need to do to take care of their farm.

Oxon Hill Farm
Design a Farm



What is your favorite food?

What ingredients make up your favorite food?

1. _____

2. _____

3. _____

4. _____

Where do those ingredients come from?

1. _____

2. _____

3. _____

4. _____

my _____ Farm

Appendix B: Curriculum Connections

Kindergarten

CCSS.ELA-LITERACY.W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question

CCSS.ELA-LITERACY.SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

CCSS.ELA-LITERACY.SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.

CCSS.ELA-LITERACY.SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.

NGSS K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.

NGSS K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

DC Early SOL K.7 The student will investigate and understand that plants and animals have basic needs and life processes. Key ideas include

- living things need adequate food, water, shelter, air, and space to survive;
- plants and animals have life cycles; and offspring of plants and animals are similar but not identical to their parents or to one another

VA.E.K.1 The student will build oral communication skills.

- VA.E.K.1.a Listen actively and speak using agreed-upon rules for discussion.
- VA.E.K.1.h Follow one- and two-step directions.
- VA.E.K.1.i Ask how and why questions to seek help, get information, or clarify information.

VA.S.K.7 The student will investigate and understand that plants and animals have basic needs and life processes

- VA.S.K.7.a living things need adequate food, water, shelter, air, and space to survive

1st Grade

CCSS.ELA-LITERACY.W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

CCSS.ELA-LITERACY.SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

CCSS.ELA-LITERACY.SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.

CCSS.ELA-LITERACY.SL.1.6 Produce complete sentences when appropriate to task and situation.

DC Early SOL 1.5 The student will investigate and understand that animals, including humans, have basic life needs that allow them to survive. Key ideas include

- animals need air, food, water, shelter, and space (habitat);
- animals have different physical characteristics that perform specific functions; and animals can be classified based on a variety of characteristics

VA.E.1.1 The student will develop oral communication skills

- VA.E.1.1.a Listen actively and speak using agreed-upon rules for discussion.
- VA.E.1.1.g Ask and respond to questions to seek help, get information, or clarify information.
- VA.E.1.1.h Restate and follow simple two-step oral directions.

VA.S.1.5 The student will investigate and understand that animals, including humans, have basic life needs that allow them to survive

2nd Grade

CCSS.ELA-LITERACY.W.2.8 Recall information from experiences or gather information from provided sources to answer a question.

CCSS.ELA-LITERACY.SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

CCSS.ELA-LITERACY.SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.

CCSS.ELA-LITERACY.SL.2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

DC Early SOL Science 2.5 The student will investigate and understand that living things are part of a system. Key ideas include

- plants and animals are interdependent with their living and nonliving surroundings;
- an animal's habitat provides all of its basic needs; and
- habitats change over time due to many influences.

VA.E.2.1 The student will use oral communication skills.

- VA.E.2.1.a Listen actively and speak using appropriate discussion rules.
- VA.E.2.1.h Ask and answer questions to seek help, get information, or clarify information.

VA.S.2.5 The student will investigate and understand that living things are part of a system.

- VA.S.2.5.b an animal's habitat provides all of its basic needs

3rd Grade

CCSS.ELA-LITERACY.W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

CCSS.ELA-LITERACY.SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

CCSS.ELA-LITERACY.SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

CCSS.ELA-LITERACY.SL.3.6 Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

VA.E.3.1 The student will use effective communication skills in a variety of settings.

- VA.E.3.1.a Use active listening strategies including but not limited to making eye contact, facing the speaker, asking questions, and summarizing.
- VA.E.3.1.c Ask and respond to questions from teachers and other group members. Ask and respond to questions from teachers and other group members.

VA.S.3.4 The student will investigate and understand that adaptations allow organisms to satisfy life needs and respond to the environment.

4th Grade

CCSS.ELA-LITERACY.W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

CCSS.ELA-LITERACY.SL.4.1.C Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

CCSS.ELA-LITERACY.SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

VA.E.4.1 The student will use effective oral communication skills in a variety of settings.

- VA.E.4.1.a Listen actively and speak using appropriate discussion rules.
- VA.E.4.1.d Ask specific questions to gather ideas and opinions from others.

VA.S.4.3 The student will investigate and understand that organisms, including humans, interact with one another and with the nonliving components in the ecosystem.

5th Grade

CCSS.ELA-LITERACY.W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.

CCSS.ELA-LITERACY.SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.

CCSS.ELA-LITERACY.SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

VA.E.5.1 The student will use effective oral communication skills in a variety of settings.

- VA.E.5.1.a Listen actively and speak using appropriate discussion rules with awareness of verbal and nonverbal cues.