

Columbia, SC 29202 SC Ag in the Clasroom

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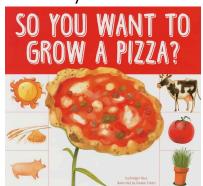
October 2024 Monthly Book

SO YOU WANT TO GROW A PIZZA?

Written by: Bridget Heos Illustrated by: Daniele Fabbri

Grade Levels Suggested: Kindergarten & Fifth

Lesson by: Allison Whiten



Scan here for Lesson Slides!





Science Lesson

Grade Level:

Kindergarten

Time length of the lesson:

• 1 hour

Standards Addressed:

Kindergarten

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

Objective of the lesson:

- I can use observations to describe patterns of what plants and animals need to survive.
- I can use a model to represent the relationship between the needs of different plants or animals and the places they live.

National Agricultural Literacy Outcomes:

- T1.K-2
 - a. Describe how farmers/ranchers use land to grow crops and support livestock
 - b. Describe the importance of soil and water in raising crops and livestock
 - o c. Identify natural resources

Materials list:

- Computer
- Projecting screen
- Pencil
- Paper
- Anchor chart paper
- Board
- Plant Needs Worksheet

Instructor procedure:

- The teacher will review the I can statements
- The teacher will review the vocabulary:
 - Plant-A plant is a living thing that grows in the earth and has a stem, leaves, and roots.
 - Animal-a particular kind of living organism, one that can move voluntarily and can find and digest food.

- Crop-a cultivated plant that is grown as food, especially a grain, fruit, or vegetable.
- Livestock- domesticated animals raised in an agricultural setting in order to provide labor and produce diversified products for consumption such as meat, eggs, milk, fur, leather, and wool.
- Needs-something required for a safe, stable and healthy life (e.g. air, water, food, land, shelter)
- The teacher will read SO YOU WANT TO GROW A PIZZA?
 - As the teacher reads they will ask questions pertaining to the needs of the plants and animals in the book.
- The teacher will explain the needs of plants and animals.
- The teacher will model determining the needs of students on the board.
 - o The teacher will write student needs on the board.
 - The teacher will model both correct and incorrect thinking. (Ex. "I think that students need candy. Is that true? Is that something they need to live?)
- The students will watch the <u>video</u> and share when they hear a need of the pigs. The teacher will write the needs of the pigs on a board or on anchor chart paper.
- The teacher will debrief with the students and allow them to talk about the needs of the pigs.
- The students will complete the plant needs worksheet independently.
 - o Students will cut out the images and glue to needs to the paper.
- Early finishers can draw a picture of crops or livestock and write or draw their needs.
- The teacher will ask students who addresses the needs of the crops and livestock and how to address these needs.

Assessment:

Assessments

- Informal:
 - Questioning throughout book
 - Sharing needs of pigs
- Formal
 - Plant Needs Worksheet

Early finishers:

- Early finishers can draw a picture of crops or livestock and write or draw their needs.
- Early finishers will use the <u>Ag in the Bitmoji Classroom</u>

Science Lesson

Grade Level:

5th

Time length of the lesson:

• 1 hour

Standards Addressed:

- Fifth
 - 5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.
 - 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Objective of the lesson:

- I can use models to describe that energy in animals' food was once energy from the sun.
- I can develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

National Agricultural Literacy Outcomes:

- T1.3-5
 - b. Explain how the interaction of the sun, soil, water, and weather in plant and animal growth impacts agricultural production

Materials list:

- Computer
- Projecting screen
- Pencil
- Paper
- Poster board/ white paper
- Colored pencils/ crayons/ markers
- Ingredients in a Pizza—Where Do They Come From?

Instructor procedure:

- The teacher will review the I can statements
- The teacher will review the vocabulary:

- Energy-power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines.
- Crop-a cultivated plant that is grown as food, especially a grain, fruit, or vegetable.
- Livestock- domesticated animals raised in an agricultural setting in order to provide labor and produce diversified products for consumption such as meat, eggs, milk, fur, leather, and wool.
- The teacher will read SO YOU WANT TO GROW A PIZZA?
 - As the teacher reads they will ask questions pertaining to the movement of energy through the plants and animals in the book.
- The teacher will model creating an ingredients energy model with oregano.
- The teacher will group students based on the following ingredients.
 - Tomato Sauce
 - o Cheese
 - o Peperoni
 - Crust
- The teacher will review directions and rubric for the ingredients energy model
 - Identify the main crop/livestock that the ingredient comes from.
 - As a group, determine the energy cycle of the plant (research if needed).
 - Develop a rough draft.
 - o Revise your rough draft.
 - Put your ingredient energy model on a piece of paper for the final copy
- The teacher will distribute the following PDF to students to read in order to determine where their ingredient comes from
 - o <u>Ingredients in a Pizza—Where Do They Come From?</u>
- The students will read the PDF and highlight words and sentences that provide information as to the movement of energy.
- The students will then follow the teachers directions to complete the ingredient energy model.

- When students are finished they can read <u>Where Does Pizza Come</u>
 <u>From? | American Farm Bureau Foundation for Agriculture</u> or use the <u>Agriculture</u> or use the <u>Agriculture</u>
- To close, the teacher will ask students to complete an exit ticket.
 - Students will draw a energy model of a hamburger (beginning at a cow)

Assessment:

- Assessments
 - o Informal:
 - Questioning while reading
 - Formal
 - Ingredients energy model

• Early finishers:

- Early finishers will read <u>Where Does Pizza Come From? | American</u>
 Farm Bureau Foundation for Agriculture
- o Early finishers will use the Ag in the Bitmoji Classroom

Additional resources that enhance the lesson:

- Please give input for future lessons!
 - https://docs.google.com/forms/d/leXB-TGhl5ptoU9o6llscyk070fE k3rlXmT05CkpMsoQ/edit

• Activities:

- At Home Learning Feb 15 | American Farm Bureau Foundation for Agriculture
- Load the Lunchbox | Math Game on My American Farm
- o Pizza Starts on the Farm
- o Grow your own pizza!
 - Get seeds, cups, soil, and water.
 - Let students plant their own pizza in their cups!

• Ag Mags:

- o Pizza Ag Mag | American Farm Bureau Foundation for Agriculture
- <u>Pizza Ag Mag Mini | American Farm Bureau Foundation for Agriculture</u>

Pork Ag Mag | National Agriculture in the Classroom

• Resources:

- Where Does Pizza Come From? | American Farm Bureau
 Foundation for Agriculture
- National Pork Board

Books:

- Pizza Counting
- o <u>Pizza Day</u>
- <u>Teaching Winter Wheat | American Farm Bureau Foundation for Agriculture</u>

• Additional Lesson Plans:

- o Pizza Time! | National Agriculture in the Classroom
- o <u>Farm-to-Pizza lesson plan MSU Extension</u>
- Pigs on the Farm (Grades K-2) | National Agriculture in the Classroom
- Pigs on the Farm (Grades 3-5) | National Agriculture in the Classroom

• South Carolina Agricultural Information

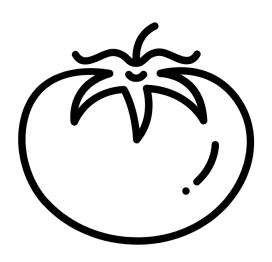
- o <u>State Agricultural Facts</u>
- TOP COMMODITIES
- o Teacher Center | National Agriculture in the Classroom
- o Food & Farm Facts | South Carolina Farm Bureau

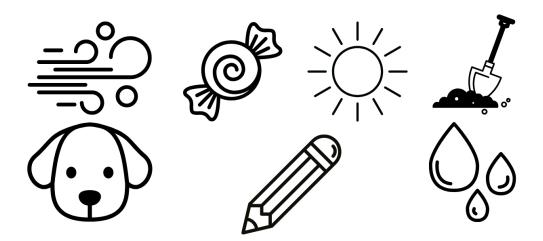
Resources:

Plant Needs Worksheet:

Name:_____

Plant Needs





Rubric:

Crop/Livestock of ingredient listed	The student has identified the crop or livestock that the ingerdient is derived from	/5
Energy Cycle is correct	The energy cycle shows the process of energy from the original crop or livestock to the consumer. The cycle includes that the ingerdient weas used in a pizza.	/5
Rough Draft	Rough draft is provided and corrections are shown on the rough draft	/5
Presentation	The poster is neat, colorful, uses illustrations and shows best effort.	/5
Total: /20		

References:

Benchmarks related to agricultural literacy and academic ... National Agricultural Literacy Outcomes. (n.d.).

https://cdn.agclassroom.org/nat/data/get/NALObooklet.pdf

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Where does pizza come from?. American Farm Bureau Foundation for Agriculture. (n.d.).

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YouTube. (n.d.). A Field Trip to Ohio Pig Farms and Farm Song. YouTube. https://www.youtube.com/watch?v=rAw7Fs_IAW4

