

Exploring a Farm!

Curriculum Guide



An Introduction to the Series

A Note to Teachers & Grown-ups

Welcome to Sprout Up Explores' six part video series, Exploring a Farm. We are an environmental education organization that has been providing free video lessons on science and nature for K-4 students throughout the pandemic. We're excited to announce that we teamed up with White Feather Farm, a sustainable farm located in Saugerties, NY, to create a new series about plants, farming, and food justice. Throughout this farm series, we'll explore local Hudson Valley history, plant and crop science, farming, community, and food justice. We'll also hear from special guests from all over the Northeast about where food comes from, the indigenous history of the land, the importance of community, and much more.

Below you'll find a description of what is included in this series and a guide with learning goals, objectives, and standards.

What's Included in this Series

Six Educational Videos: All our videos are free! Just head to our website to get started or sign up for our Youtube platform. This series is called Exploring a Farm!

Second Nature Activity Worksheets: Each video has an accompanying 'Second Nature' worksheet that contains a variety of hands-on activities, reflective prompts, projects, and more. Some have special activities that can be sent in to be featured on our social media platforms, so look out for those!

Spanish & English Translation: The videos and their worksheets are available with both Spanish and English subtitles. To access a Spanish language version of this guide please [click here](#).

How to use the Second Nature packet

The second nature is intended for students and/or children to use throughout the series. Each second nature is connected to a video within the series and can be completed after each corresponding video.

The packet can be completed by printing it, or students can create their very own nature notebook following this video [here](#).

Connecting with the Sprout Up Community!

Send copies any and or all activities to education@sproutup.org to be featured on social media, in our newsletter, and to connect with other young students across the country! For questions regarding the second nature packet and accessing this series email maddie@sproutup.org

Curriculum Guide



Goal

The purpose of this series is to introduce young learners to the life cycle of plants and farming in the Hudson Valley region. Students will asynchronously engage with video material that exposes them to the different seasons of growing food, and the various planting and farming practices that coincide with that season. Each video explores small-scale farming systems, the perspectives of BIPOC organizations, farm education organizations, and indigenous knowledge systems. Using the plant life cycle as a common thread, students will learn from farmers about how food gets from seed to their plate and the importance of knowing one's own community in that process.

Learning Objectives

- Students will understand the basic life cycle of a plant and why each stage of its cycle is significant to farmers and our surrounding ecosystems
- Students will be able to identify key farming practices of a small-scale food-producing farm
- Students will begin to think critically about growing practices and sustainable farming while considering the rich histories and perspectives of the Hudson Valley farming region
- Students will ask questions, engage with and learn from their own community, about local farming practices, environment, food, and history.

Learning Standards

We have included some NYS science and ELA learning standards that meet curriculum requirements for each educational video. There is also a list of social-emotional, social justice, and social studies standards that apply to the general objectives of the series. If you have any questions about the content of the curriculum, please feel free to reach out to maddie@sproutup.org



Video Title

NYS Science & ELA Learning Standards

Seeds

New York State P-12 Science Learning Standards

P-LS1-1. Observe familiar plants and animals (including humans) and describe what they need to survive.

LS3.B: Variation of Traits

Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. (PLS3-1)

LS4.C: Adaptation

For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)

ESS3.A: Natural Resources

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

LS1.A: Structure and Function

Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (P-LS1-2)

LS1.C: Organization for Matter and Energy Flow in Organisms (NYSED)

All animals need food, air, and water in order to live, grow, and thrive. Animals obtain food from plants or from other animals. Plants need water, air, and light to live, grow, and thrive. (P-LS1-1)

LS2.A: Interdependent Relationships in Ecosystems

(NYSED) Plants depend on water, light, and air to grow. (2-LS2-1)

ELA & Literary Standards

Use a combination of drawing, dictating, oral expression, and/or emergent writing to narrate an event or events in a sequence. (P-PS1-1),(P-PS2-1),(PPS4-1)

Engage in a discussion using gathered information from experiences or provided resources. (P-LS1-1),(P-LS1-2),(P-LS3-1)

Seedlings & Soil

New York State P-12 Science Learning Standards

P-LS1-1. Observe familiar plants and animals (including humans) and describe what they need to survive.

ESS3.A: Natural Resources

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

LS1.A: Structure and Function

All organisms have external parts. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (P-LS1-2)

LS1.C: Organization for Matter and Energy Flow in Organisms (NYSED)
All animals need food, air, and water in order to live, grow, and thrive. Animals obtain food from plants or from other animals. Plants need water, air, and light to live, grow, and thrive. (P-LS1-1)

ELA & Literary Standards

Use a combination of drawing, dictating, oral expression, and/or emergent writing to narrate an event or events in a sequence. (P-PS1-1),(P-PS2-1),(PPS4-1)
Develop questions and participate in shared research and explorations to answer questions and to build knowledge. (2-LS2-1),(2-LS4-1)

Flowers

New York State P-12 Science Learning Standards

P-LS1-1. Observe familiar plants and animals (including humans) and describe what they need to survive.

LS4.D: Biodiversity and Humans

Populations live in a variety of habitats, and change in those habitats affects the organisms living there. (3-LS4-4)

ESS3.A: Natural Resources

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)

LS2.A: Interdependent Relationships in Ecosystems

Animals depend on plants or other animals for food. (2-LS2-2)

(NYSED) Plants depend on water, light, and air to grow. (2-LS2-1)

(NYSED) Some plants depend on animals for pollination and for the dispersal of seeds from one location to another. (2-LS2-2)

LS1.C: Organization for Matter and Energy Flow in Organisms (NYSED)

All animals need food, air, and water in order to live, grow, and thrive. Animals obtain food from plants or from other animals. Plants need water, air, and light to live, grow, and thrive. (P-LS1-1)

ELA & Literary Standards

Use a combination of drawing, dictating, oral expression, and/or emergent writing to narrate an event or events in a sequence. (P-PS1-1),(P-PS2-1),(PPS4-1)

Adult Plants

New York State P-12 Science Learning Standards

P-LS1-1. Observe familiar plants and animals (including humans) and describe what they need to survive.

LS3.B: Variation of Traits

Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. (PLS3-1)

LS4.D: Biodiversity and Humans
 Populations live in a variety of habitats, and change in those habitats affects the organisms living there. (3-LS4-4)

LS1.B: Growth and Development of Organisms
 Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. (3-LS1-1)

LS1.A: Structure and Function
 All organisms have external parts. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (P-LS1-2)

ELA & Literary Standards
 Use a combination of drawing, dictating, oral expression, and/or emergent writing to narrate an event or events in a sequence. (P-PS1-1),(P-PS2-1),(PPS4-1)
 PKW7 Engage in a discussion using gathered information from experiences or provided resources. (P-LS1-1),(P-LS1-2),(P-LS3-1)

Harvest & Community

New York State P-12 Science Learning Standards
 P-LS1-1. Observe familiar plants and animals (including humans) and describe what they need to survive.

ELA & Literary Standards
 Use a combination of drawing, dictating, oral expression, and/or emergent writing to narrate an event or events in a sequence. (P-PS1-1),(P-PS2-1),(PPS4-1)
 Develop questions and participate in shared research and explorations to answer questions and to build knowledge. (2-LS2-1),(2-LS4-1)
 Participate in discussions about a text. (P-LS1-1),(P-LS2-1),(P-LS3-1)

End of Cycle

New York State P-12 Science Learning Standards
 P-LS1-1. Observe familiar plants and animals (including humans) and describe what they need to survive.

LS1.A: Structure and Function
 All organisms have external parts. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (P-LS1-2)

ELA & Literary Standards
 Use a combination of drawing, dictating, oral expression, and/or emergent writing to narrate an event or events in a sequence. (P-PS1-1),(P-PS2-1),(PPS4-1)
 Develop questions and participate in shared research and explorations to answer questions and to build knowledge. (2-LS2-1),(2-LS4-1)
 Include digital media and/or visual displays in presentations to clarify or support ideas, thoughts, and feelings. (2-LS2-2)

Other Standards

Social Studies Standards (K-5)

- Develop questions about the community
- Identify similarities and/or differences between his/her/their community and other communities
- Ask geographic questions about where places are located and why they are located there, using location terms and geographic representations, such as maps, photographs, satellite images, and models. Describe where places are in relation to each other.
- Identify human activities and human-made features; identify natural events or physical features.
- Describe how the environment affects his/her/their and other people's activities.

NYS Social Emotional Standards (K-5)

Goal 1: Develop self-awareness and self-management skills essential to success in school and in life
1B.1b. Identify family, peer, school, and community strengths and supports
Goal 2: Use social awareness and interpersonal skills to establish and maintain positive relationships
2A.2b. Describe the expressed feelings and perspectives of others
2B.1a. Describe the ways that people are similar and different
2B.2a. Identify differences among, and contributions of, various social and cultural groups
Goal 3: Demonstrate ethical decision-making skills and responsible behaviors in personal, school, and community contexts
3C.2b. Identify and perform roles that contribute to one's local community

Social Justice Standards

*social justice standards is a framework created by Teaching Tolerance, that is intended to serve as a general guide for teachers to engage in anti-racist and anti-bias education practice. It is divided into four categories - identity, diversity, justice and action (IDJA)

Identity

Diversity

Justice

Justice 14

JU.K-2.14 I know that life is easier for some people and harder for others and the reasons for that are not always fair.

Action



Sprout Up is a volunteer-led organization that teaches children concepts in environmental science, sustainability, and the unique ecosystems that surround them. Our video program, Sprout Up Explores, has mobilized dozens of college student volunteers across the country to create educational videos about science, nature, and environmental justice during the pandemic for K-4 students.



White Feather Farm is a small-scale sustainable farm located in Saugerties, NY whose mission is to create a connection between community, culture, and land.