



ILLINOIS



Ag in the Classroom

Get-A-Grant Workshop!

For Today

- Book Grant Information
 - Books by category and lesson ideas
 - Previous Recipients
- Project Grant Information
 - Previous Recipients
- Add questions to Q&A box, time at end to answer



Book Grant

The purpose is to integrate agriculture into your spring classroom curriculum with the use of literature! The books you choose should be incorporated into a project, lesson, or unit study in the spring semester.

The Basics:

- Amount: Up to \$250
- Application Deadline: October 18, 2024
- Grant Recipients notified by November 8, 2024

The Important Stuff:

- Funding Agreement completed and signed by December 6, 2024
 - **Forfeit the Grant**
- Final Report due May 30, 2025
 - **Whole school blacklisted**

The 5 Categories:

Gardens

Insects

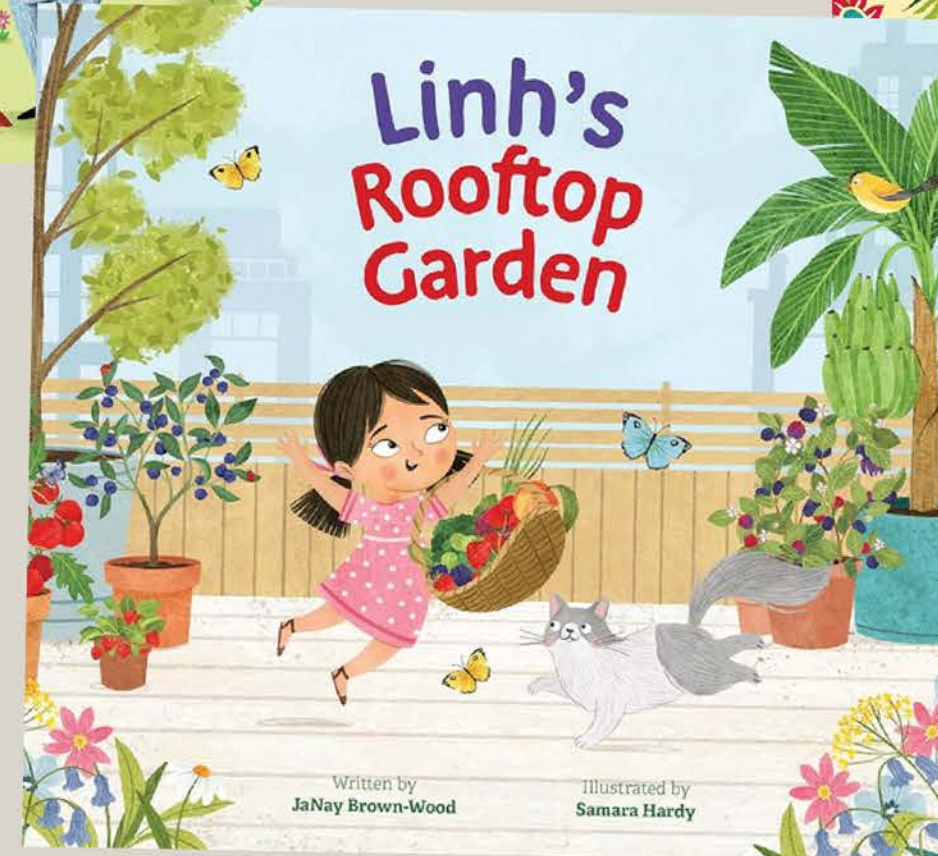
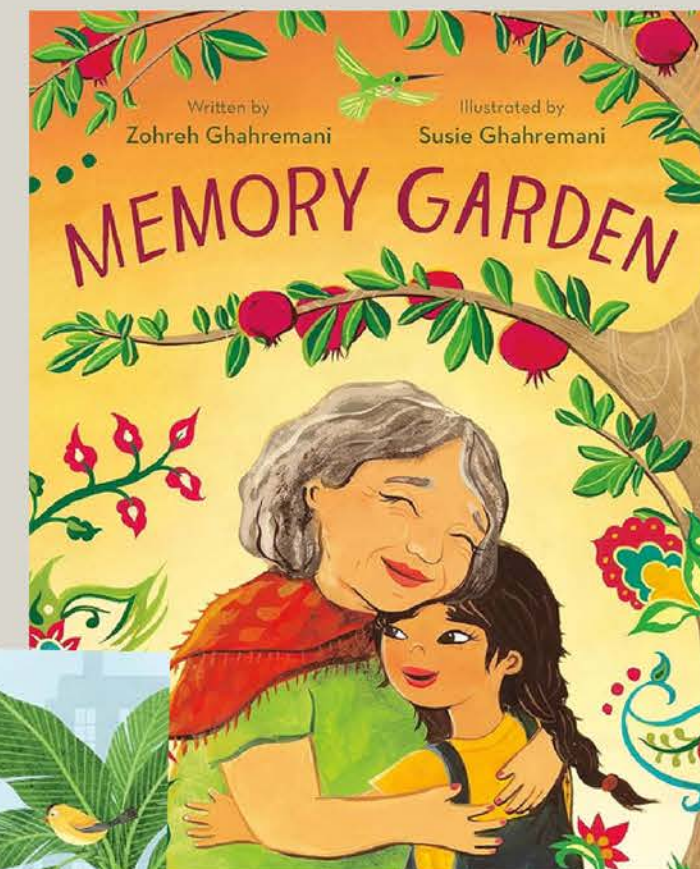
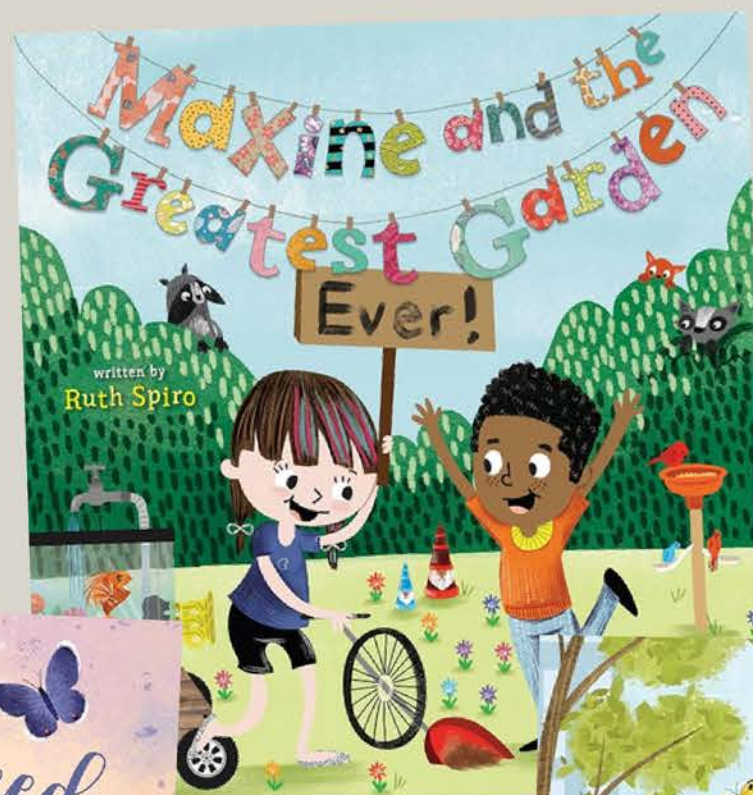
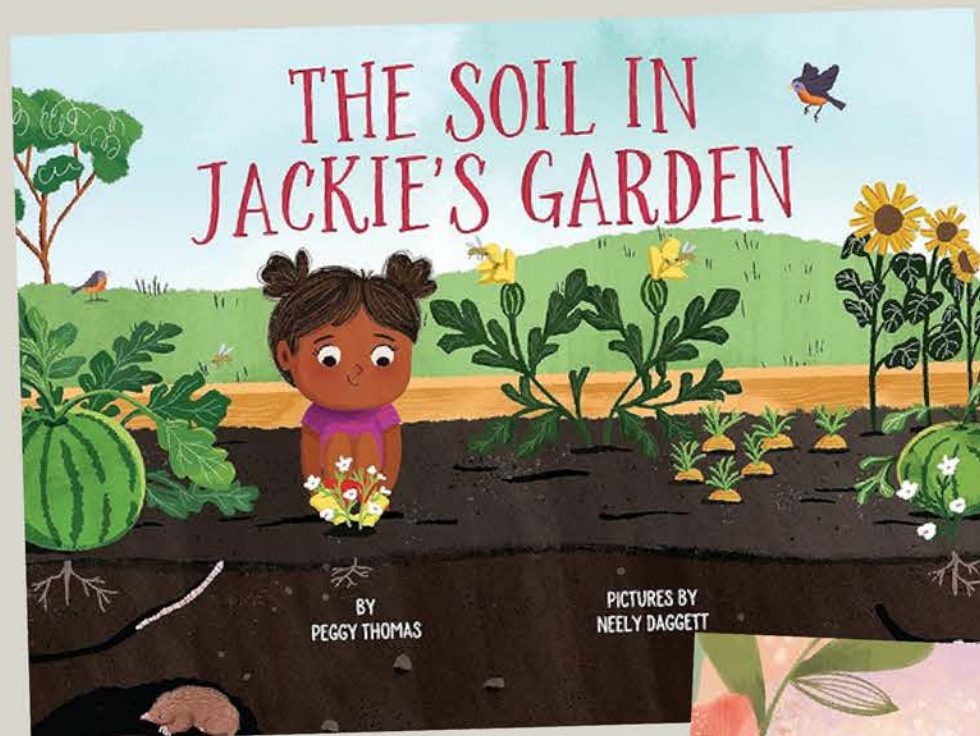
Trees

SEL & Agriculture

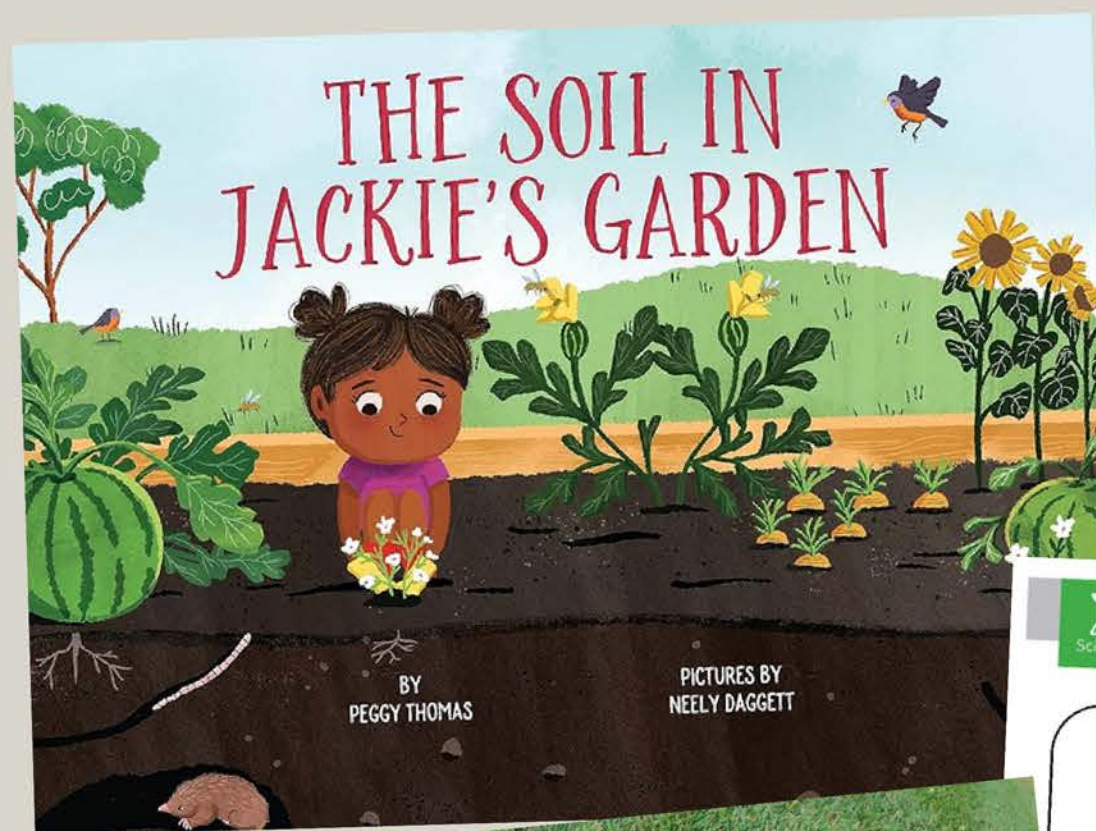
Mythology & Agriculture

PAST
DUE

Gardens



Gardens



Soil Your Undies



SOIL YOUR UNDIES!
UNDERWEAR DIARY

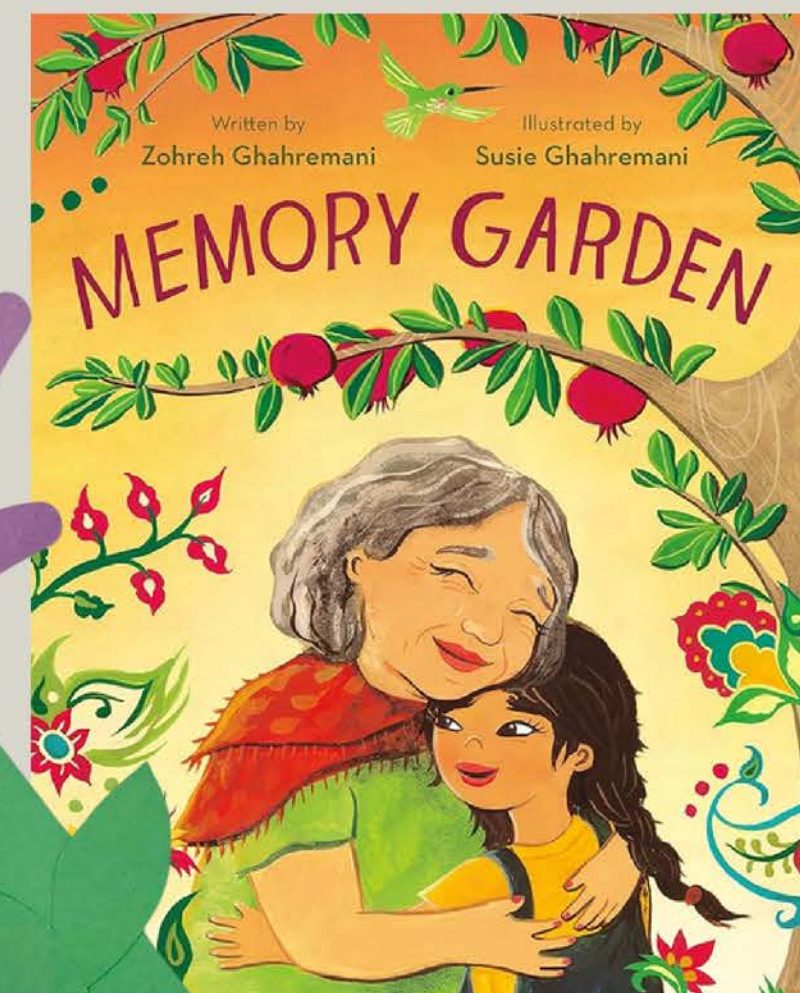
Which pair of undies changed the most? Why?

Which pair of undies changed the least? Why?

Were your predictions correct? Why or why not?

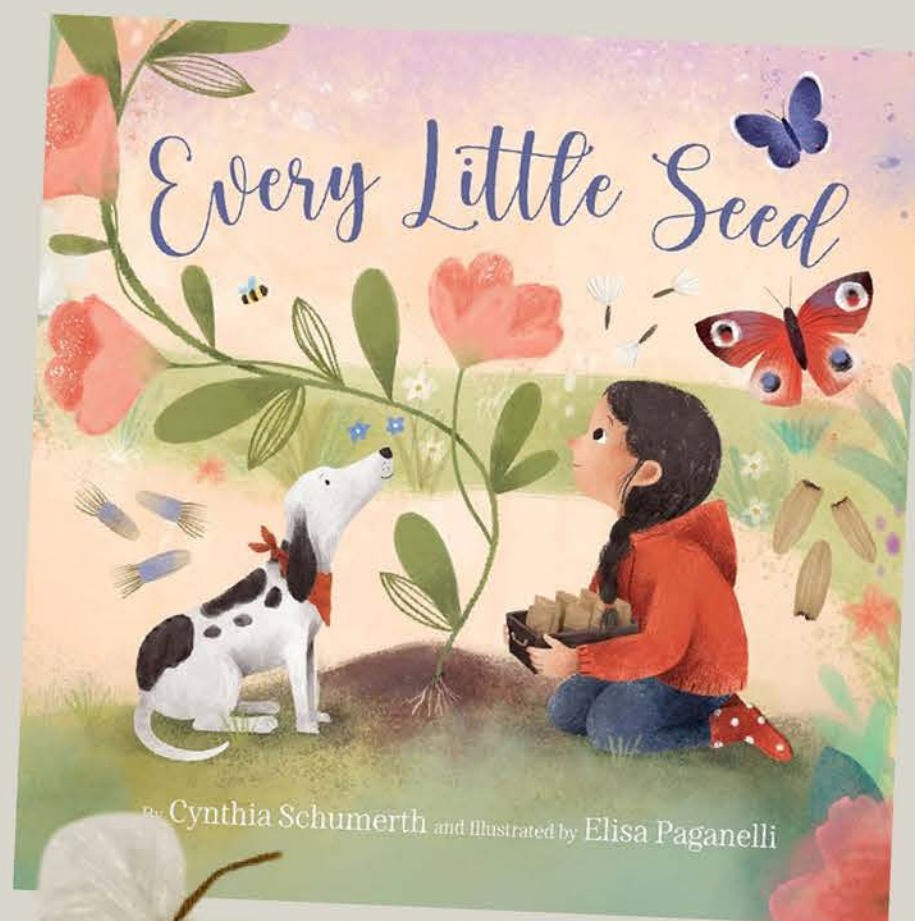
What does it mean for a soil to be "healthy"?

AGRICULTURE in the Classroom. For more great educational agriculture resources, visit: agintheclassroom.org

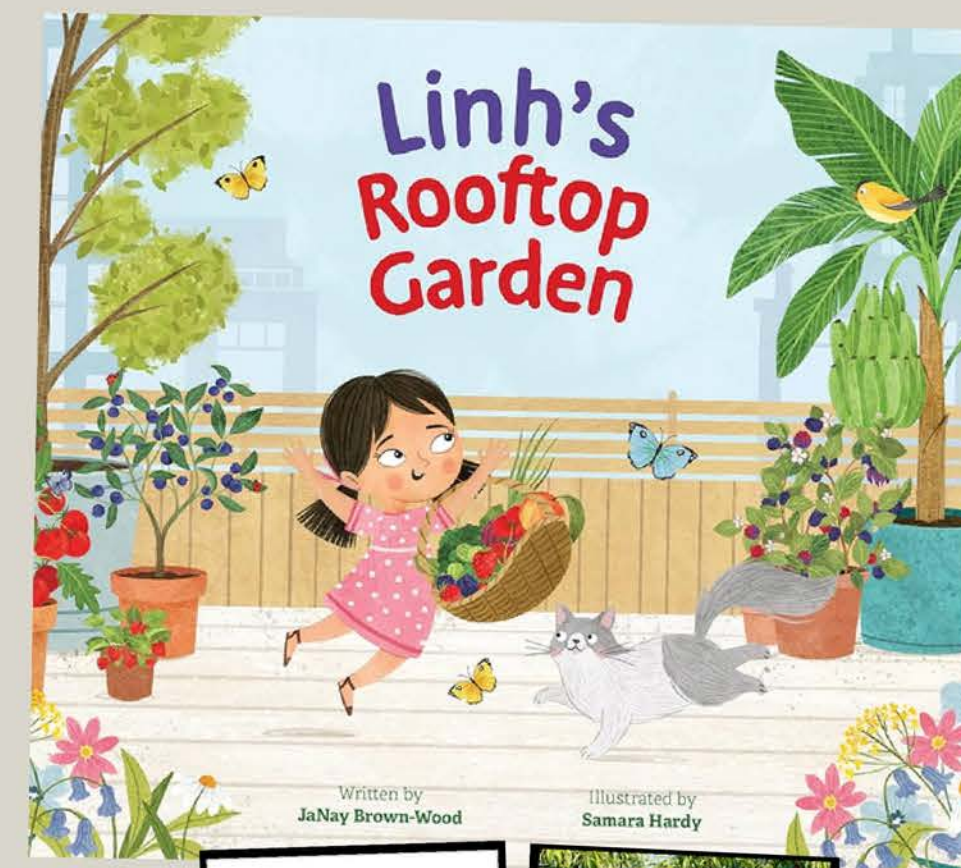


Handprint Flower

Gardens



Build a
Bee Hotel



PEACH



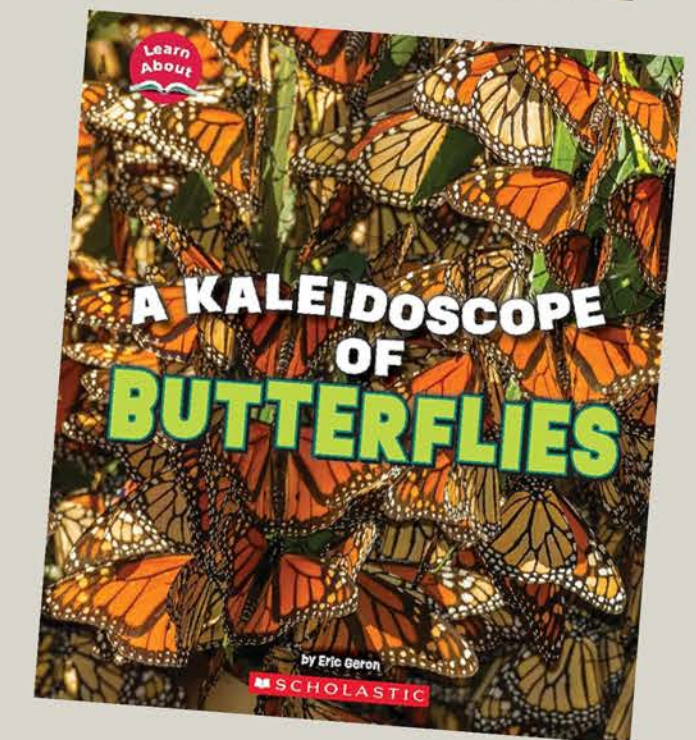
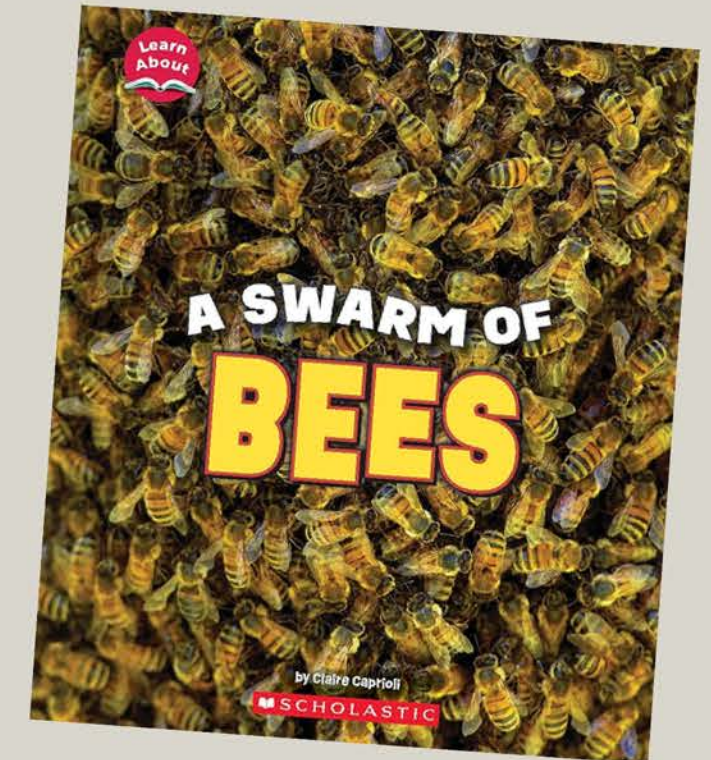
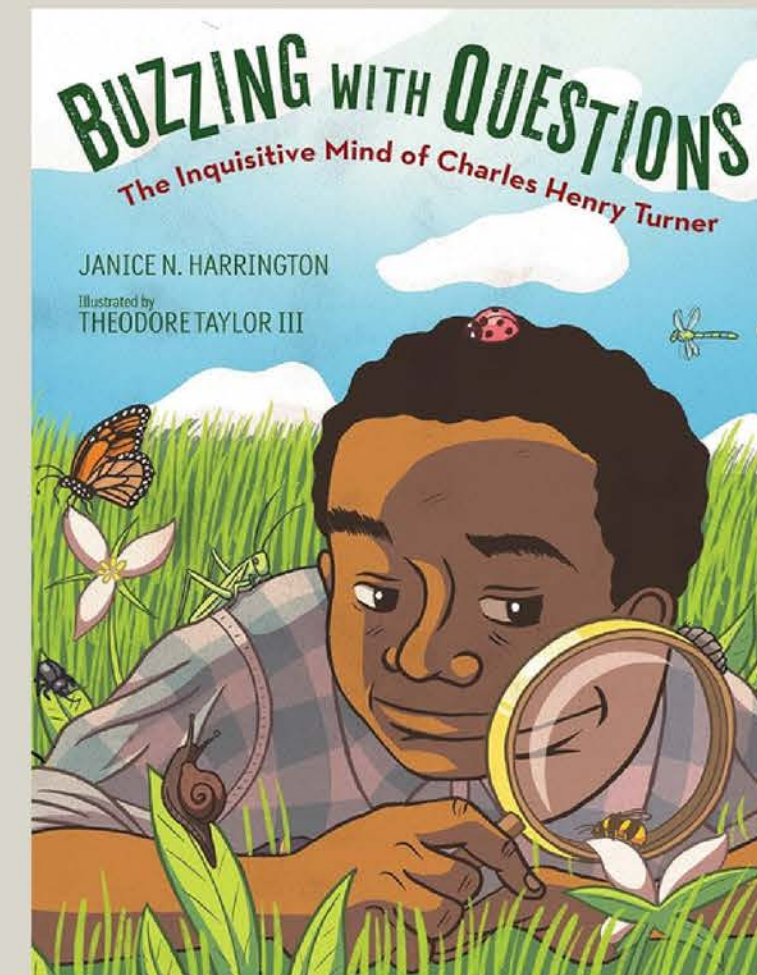
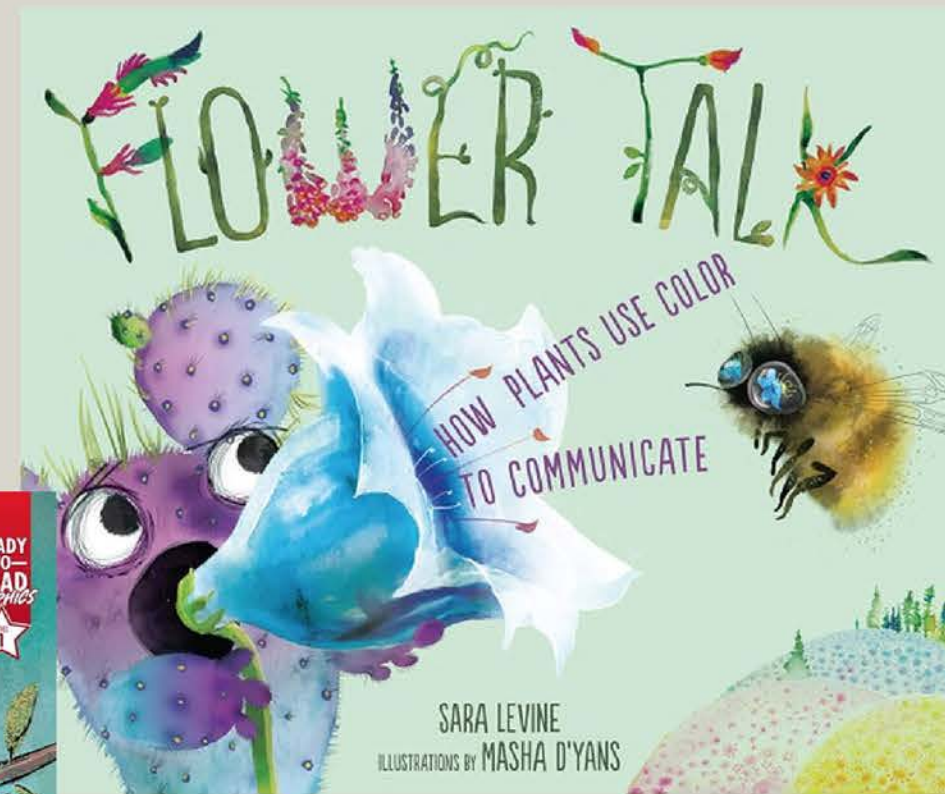
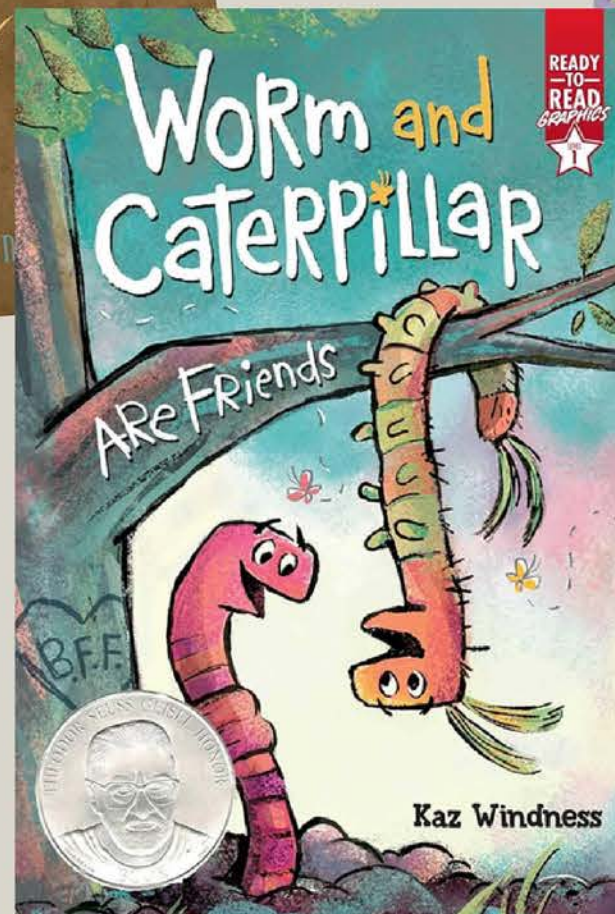
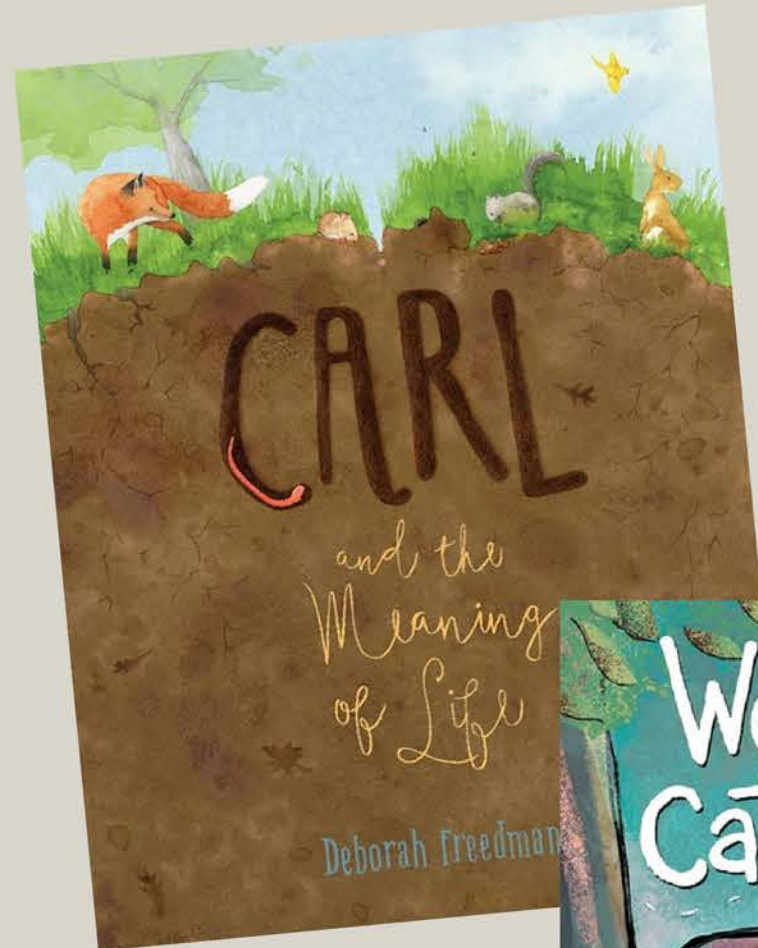
Ins &
Outs



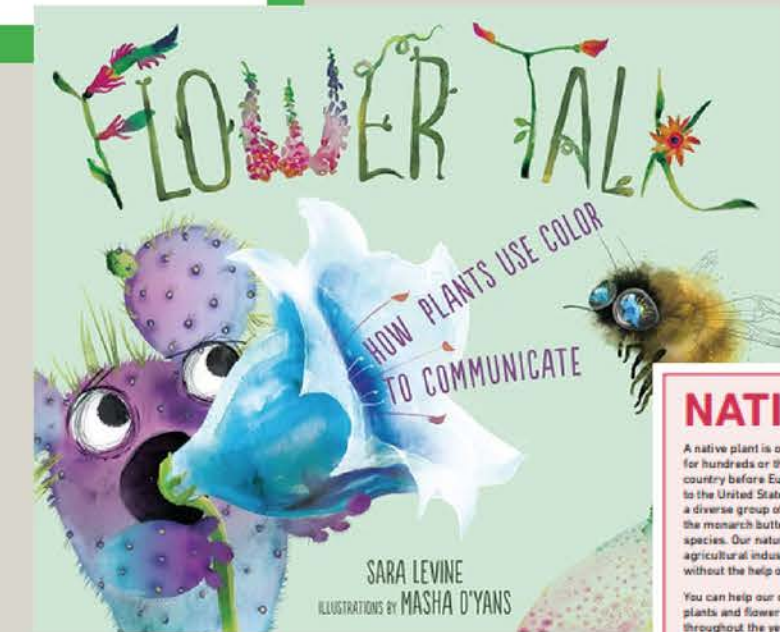
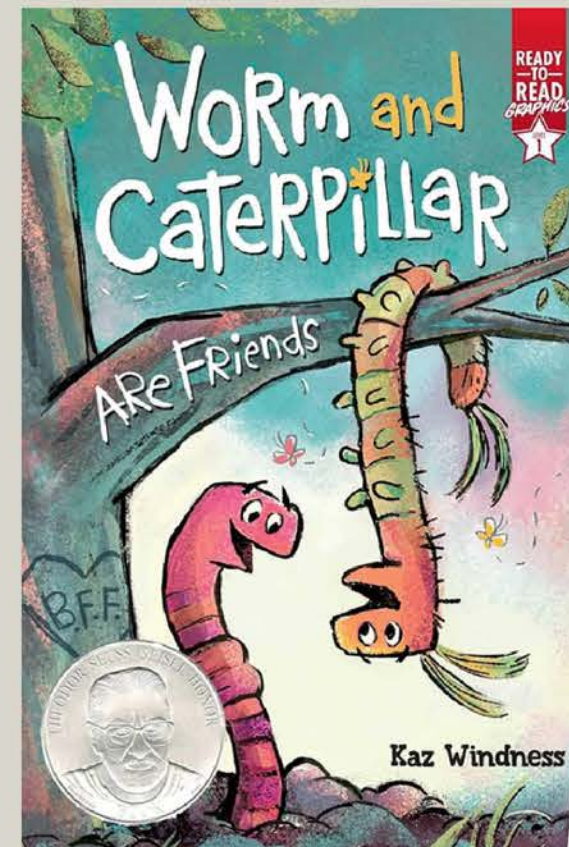
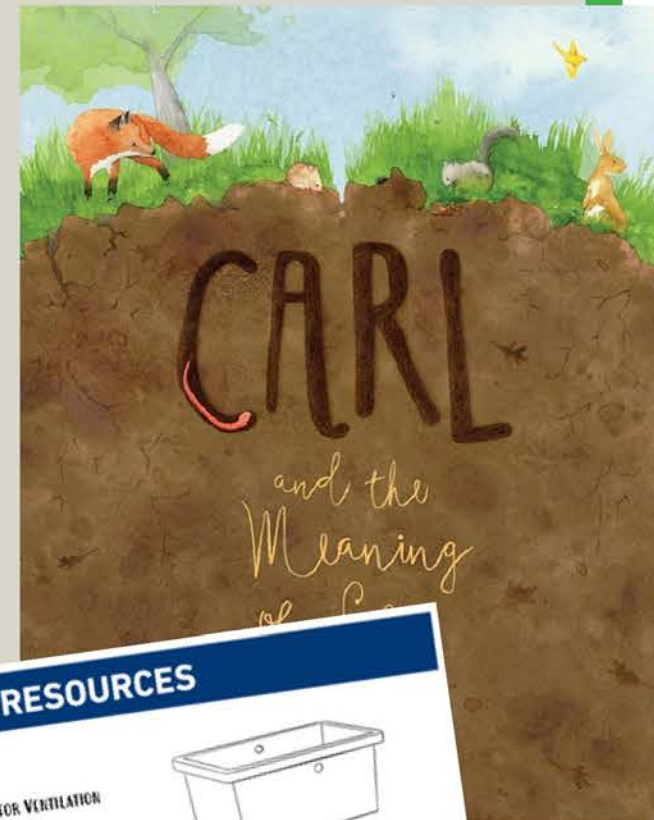
Garden in a Glove



Insects



Insects



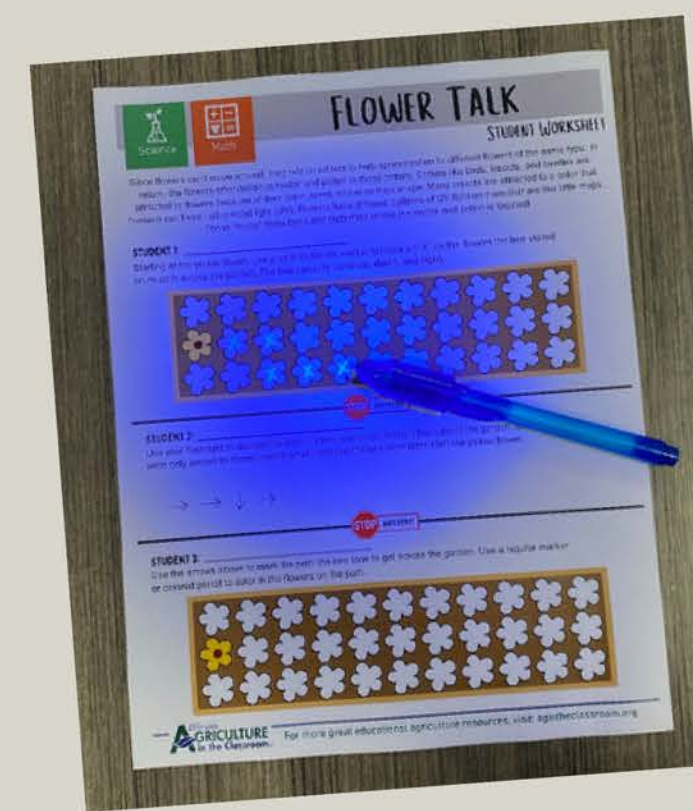
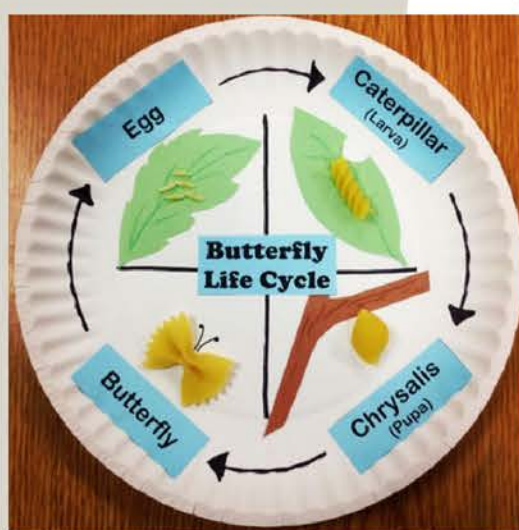
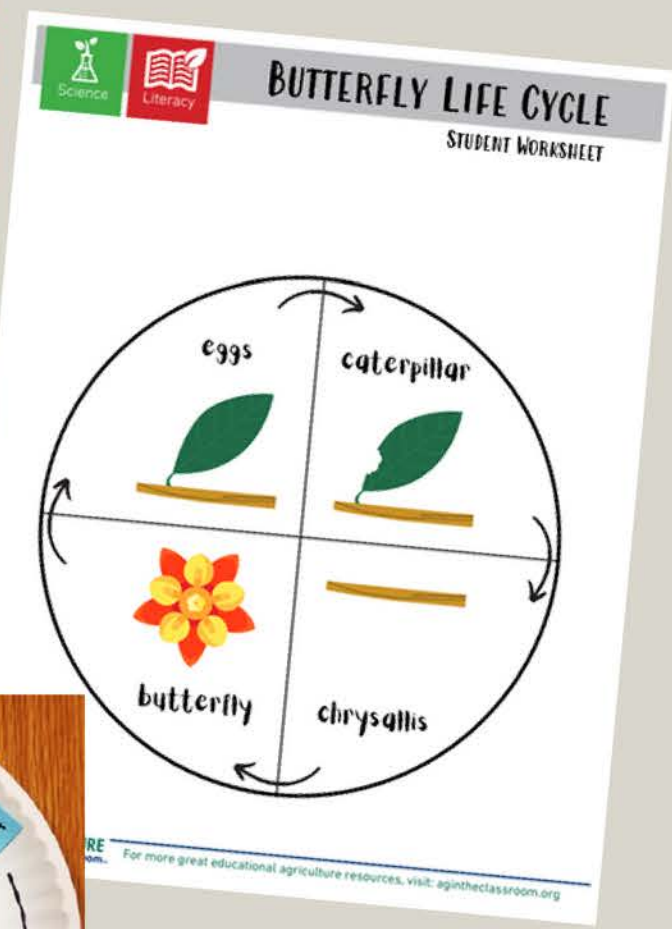
NATIVE FLOWERS

A native plant is one that has been a part of the balance of nature for hundreds or thousands of years. Only plants found in our country before European settlement are considered to be native to the United States. The native plants of the Midwest help support a diverse group of pollinators. Illinois is a vital breeding area for the monarch butterfly and is home to hundreds of other pollinator species. Our natural world relies on pollination, but so does our agricultural industry. So much of what we eat would not be available without the help of pollinators.

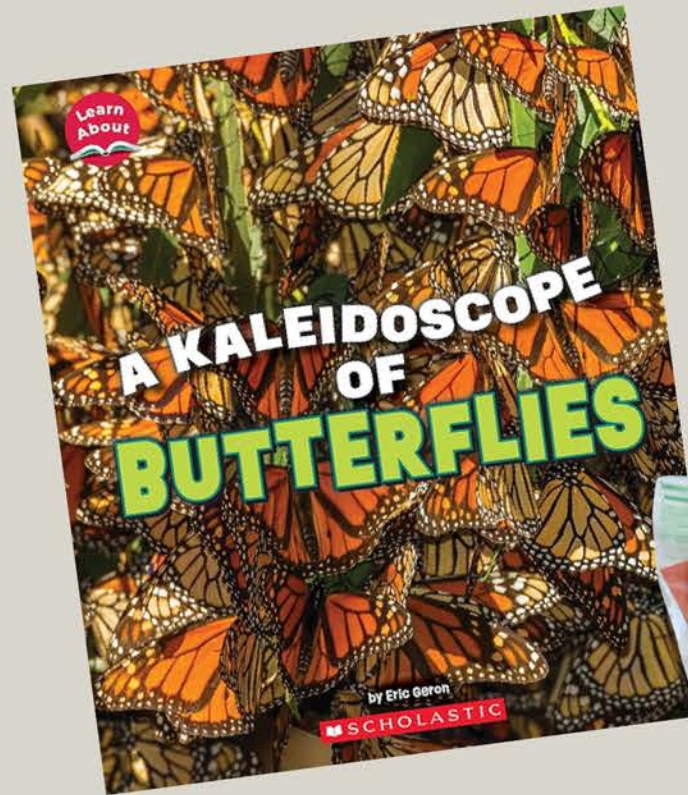
You can help our diverse pollinator populations by planting native plants and flowers in your landscape that provide food and shelter throughout the year. Try to plant at least three different flowering plants for each part of the growing season. You should also aim for a variety of colors and flower shapes to attract a diversity of pollinators. This will help ensure that pollinators always have a food source in your neighborhood. There are hundreds of plants and flowers that you could plant in your landscape that can help pollinators. Here are a few easy plants to get started with.



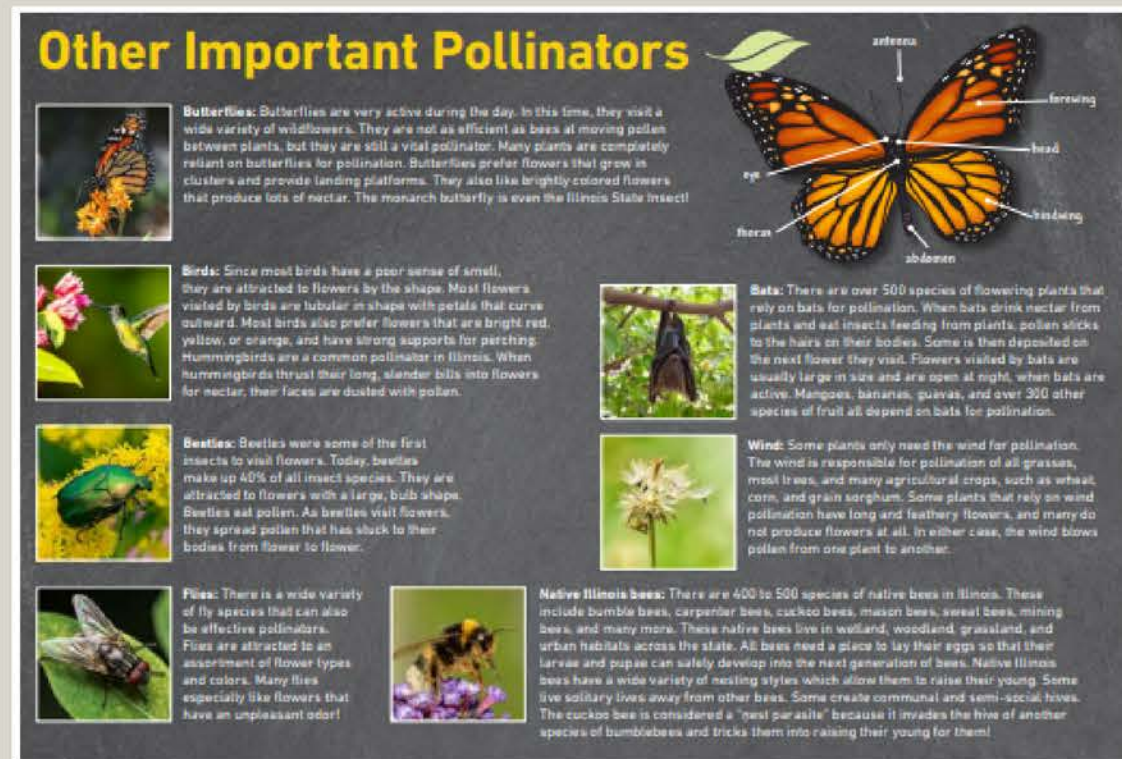
Classroom Vermicomposting



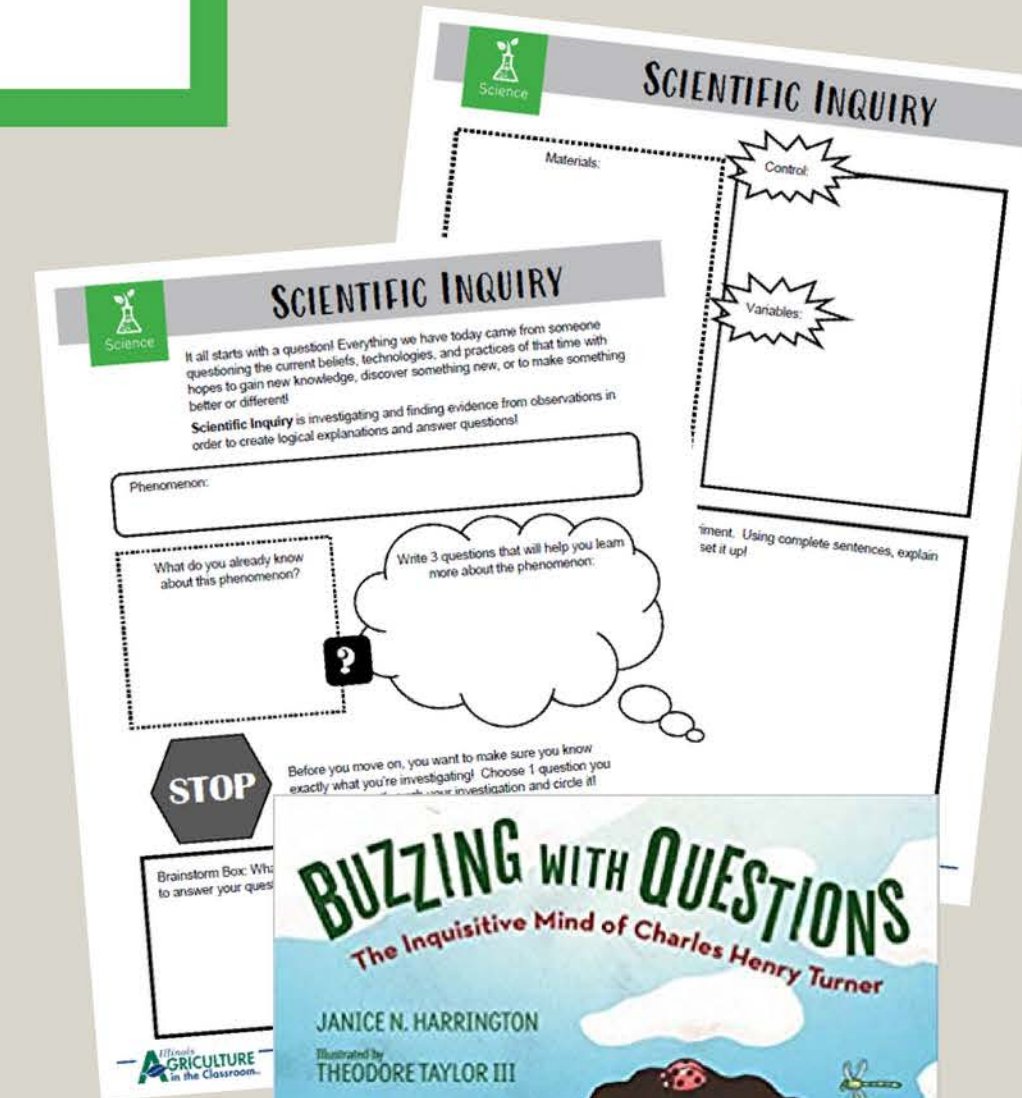
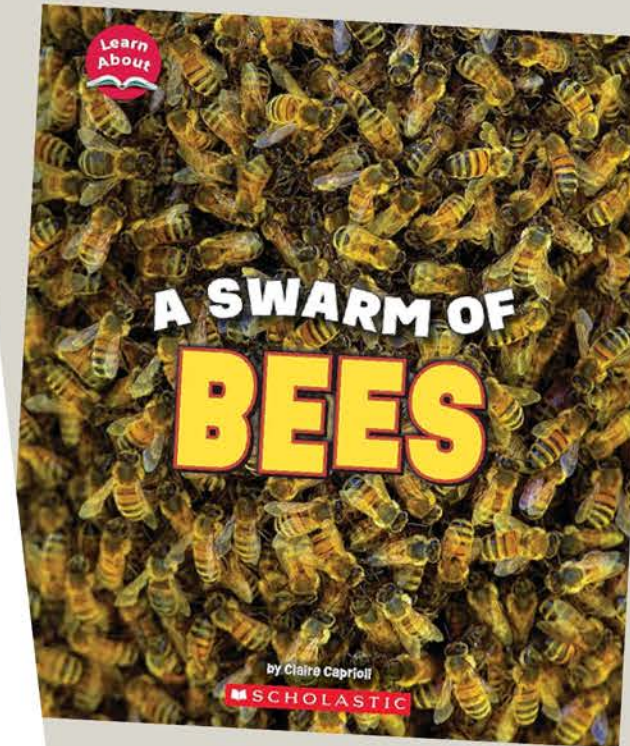
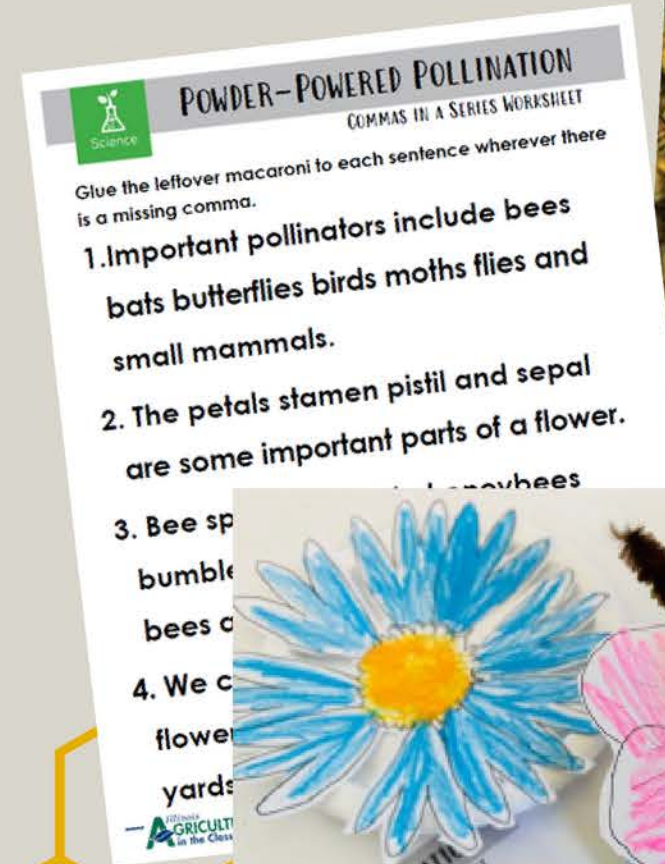
Insects



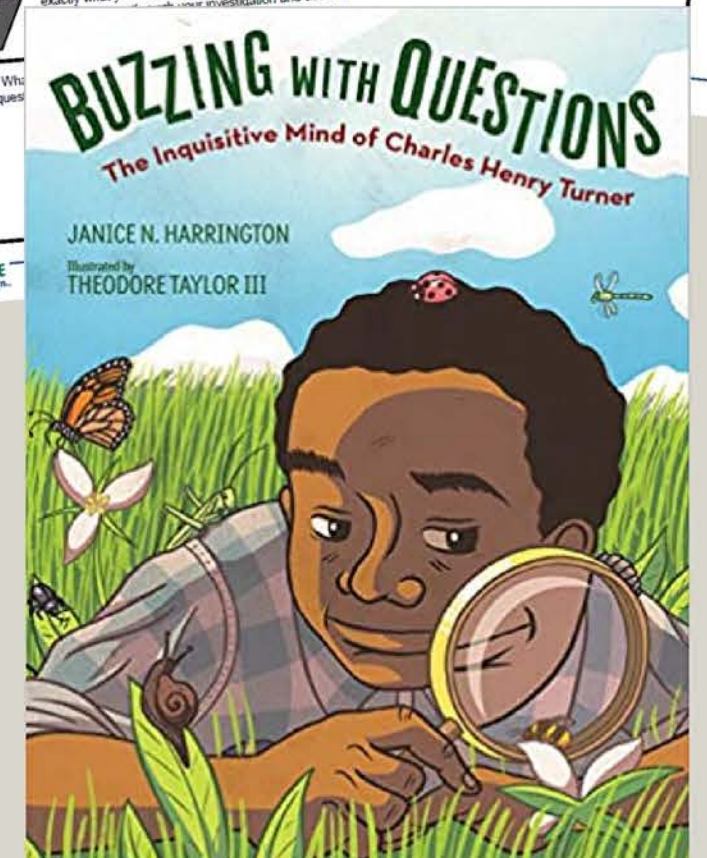
Bag Butterfly



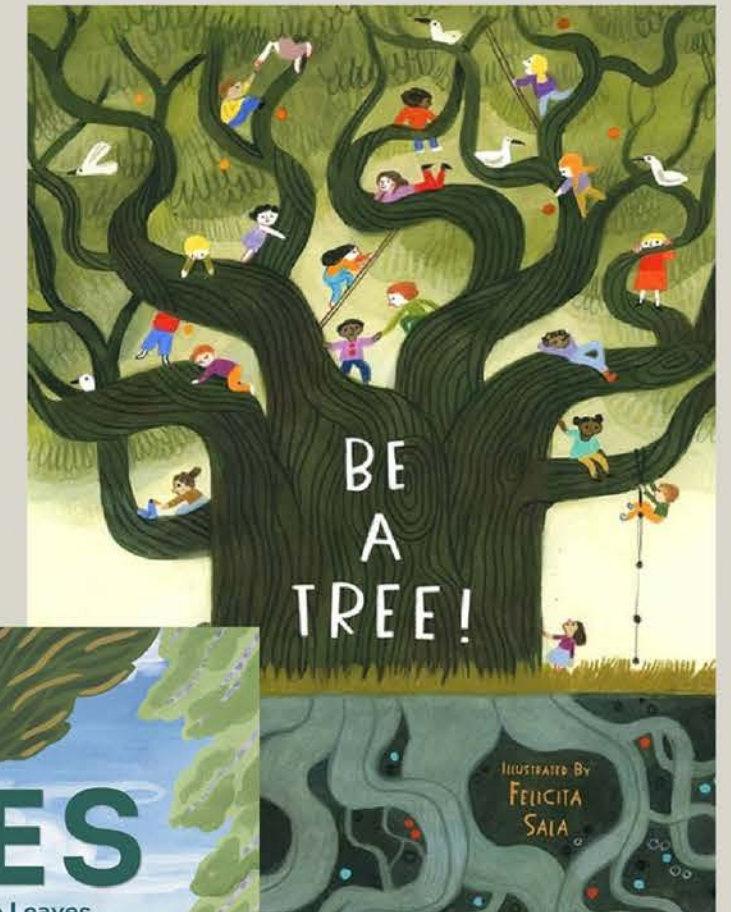
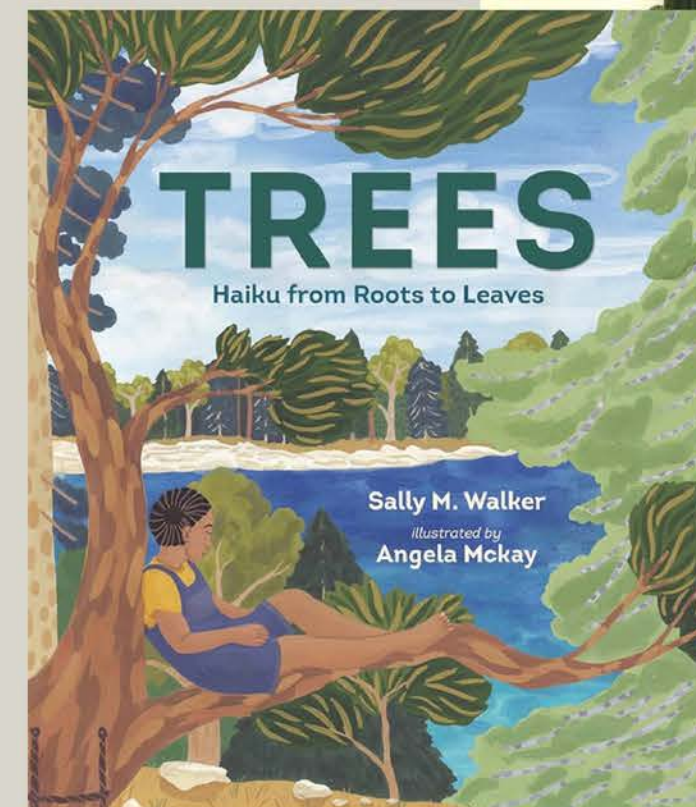
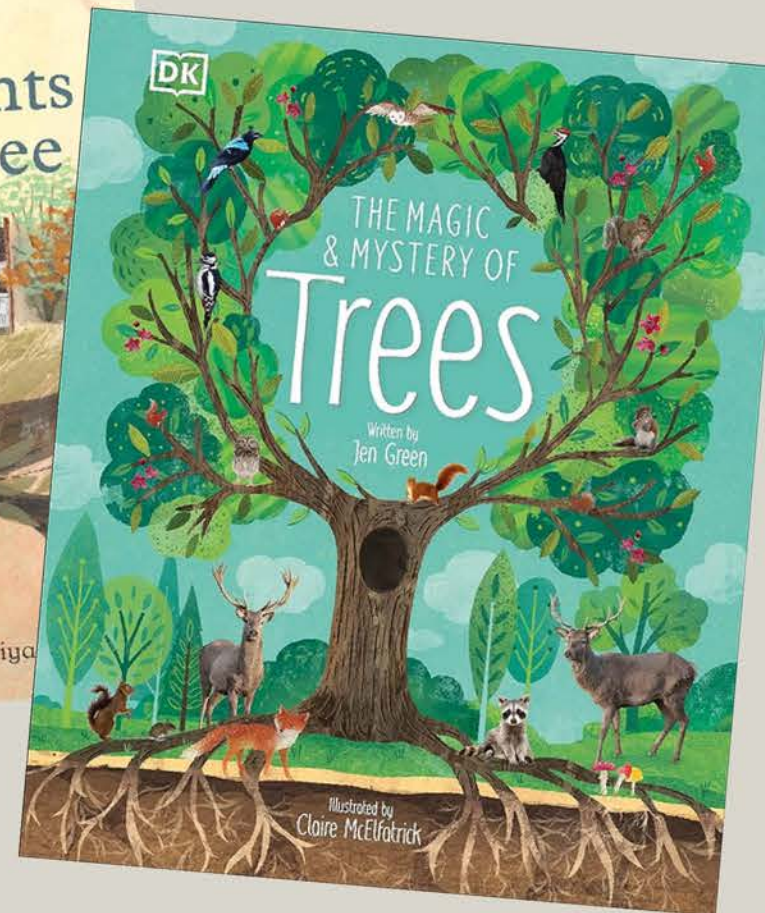
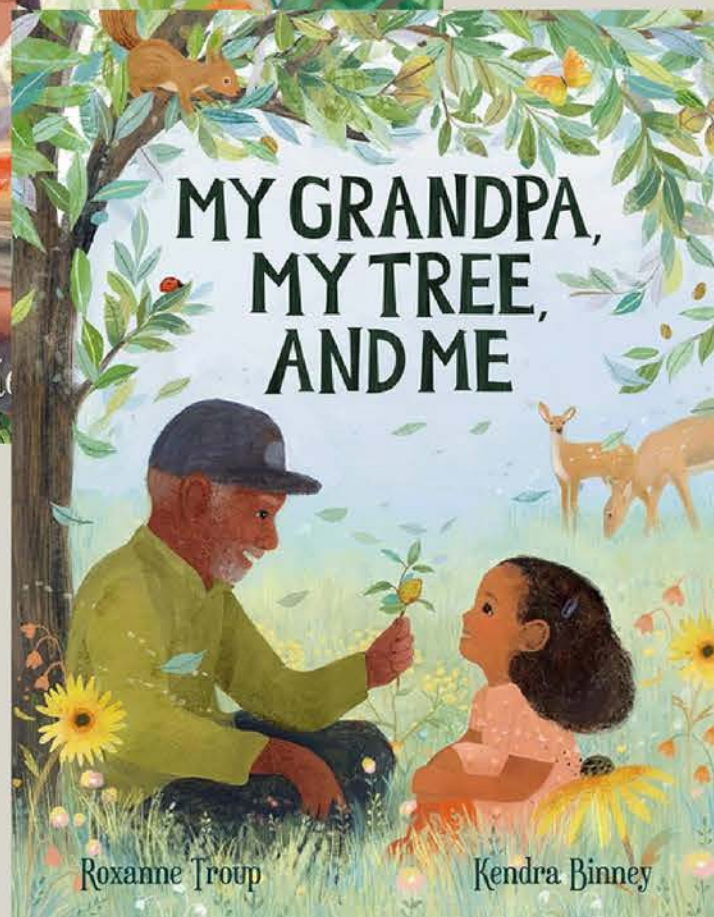
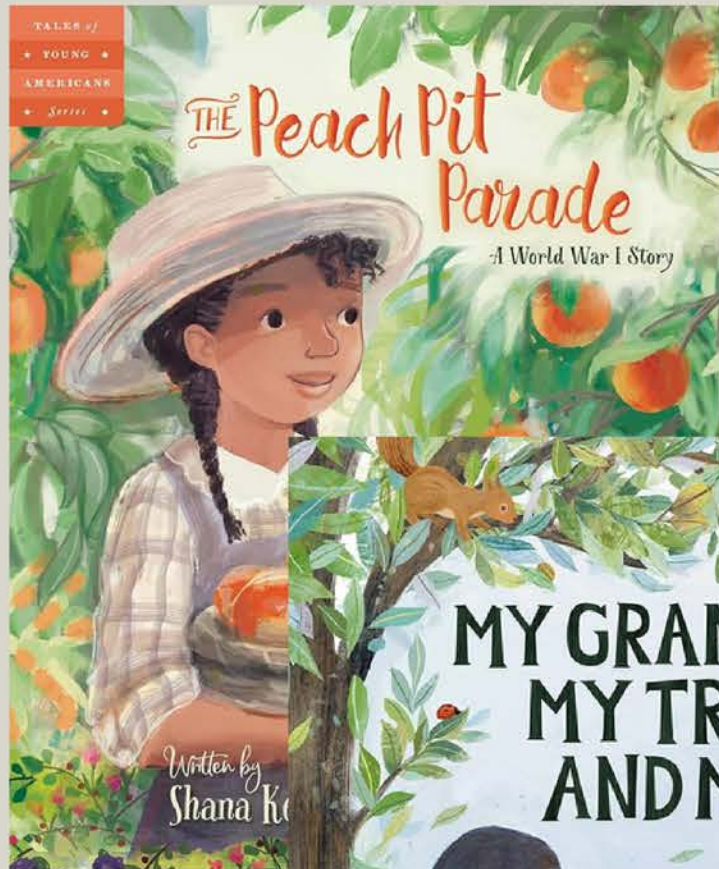
IAITC Pollinator Ag Mag



IAITC Bee School Series



Trees



Trees

Trees Farm Bites

Pecans

In 2022, the United States produced 275 million pounds of pecans over 407,000 acres of land. Pecans are the only tree nut native to North America. Pecans are mainly grown in orchards, but they are also grown naturally in groves.

Pecans are grown on trees. A natural group of pecan trees is called a grove, while a planted group of pecan trees is called an orchard. It takes one tree five to eight years to produce its first pecans. They can grow up to 100 feet tall and spread 70 feet across. In orchards, it is common for the pecan trees to be planted in straight rows for easier harvesting and maintenance.

Maple

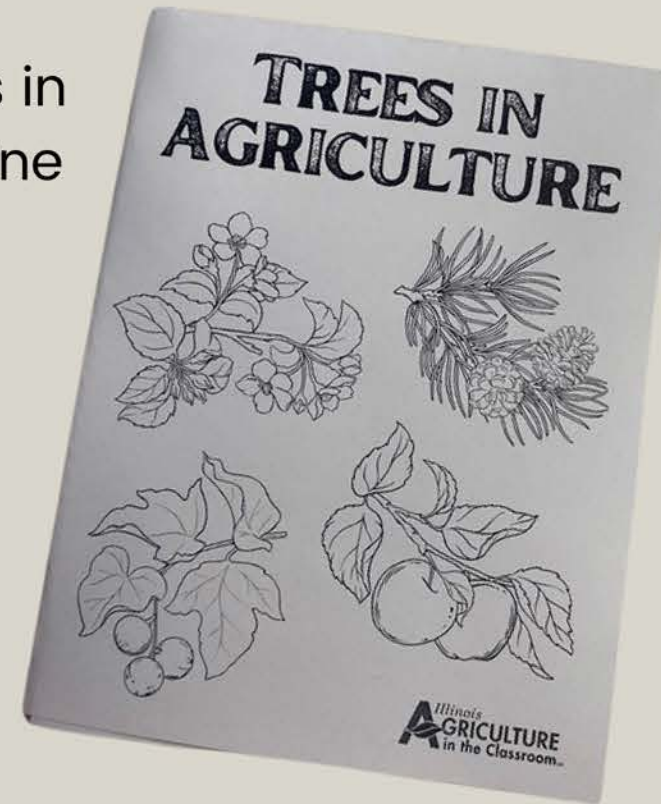
Each year, the United States produces around five million gallons of maple syrup. Natural maple syrup has one simple ingredient: sap. Sap comes from tapping a maple tree. After the tap has been placed, sap will start to run out of the tap.

The best time to tap a maple tree is when the temperatures are above freezing during the day but drop below freezing at night. Vermont, New York, Maine, and Wisconsin are the top producing states due to their climates.


Maple syrup is made simply by boiling the sap produced by maple trees and condensing it down to the natural sugars. It takes an average of 40 gallons of sap to produce a single gallon of maple syrup. Maple syrup is mainly used as a condiment for breakfast foods like pancakes, waffles, oatmeal and French toast. However, it can also be used as a sweetener or flavoring agent when baking.

February to March is the ideal time to tap a maple because the changing of the temperature encourages sap movement within the tree. A maple tree must also be at least 40 years old before it can be tapped. A healthy tree will produce around 1 to 3 gallons of sap a day. A season will last about 4-6 weeks, with each tap hole producing 15 to 80 gallons of sap each year.

Trees in Ag Zine



Reading Rings


Science

READING RINGS

STUDENT WORKSHEET

Name: _____

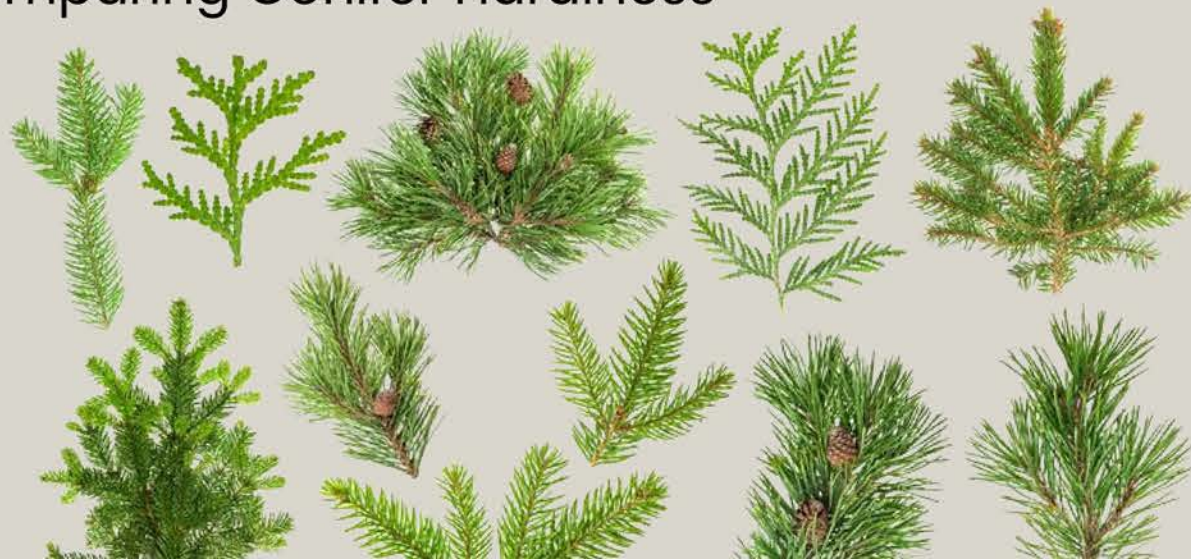


Age of Tree: _____
Significant Life Events: _____



Age of Tree: _____
Significant Life Events: _____

Comparing Conifer Hardiness

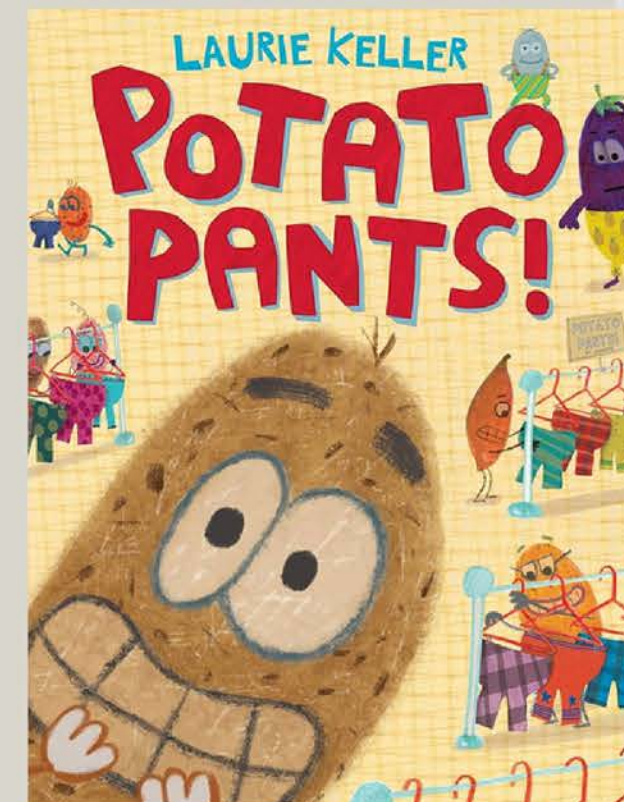
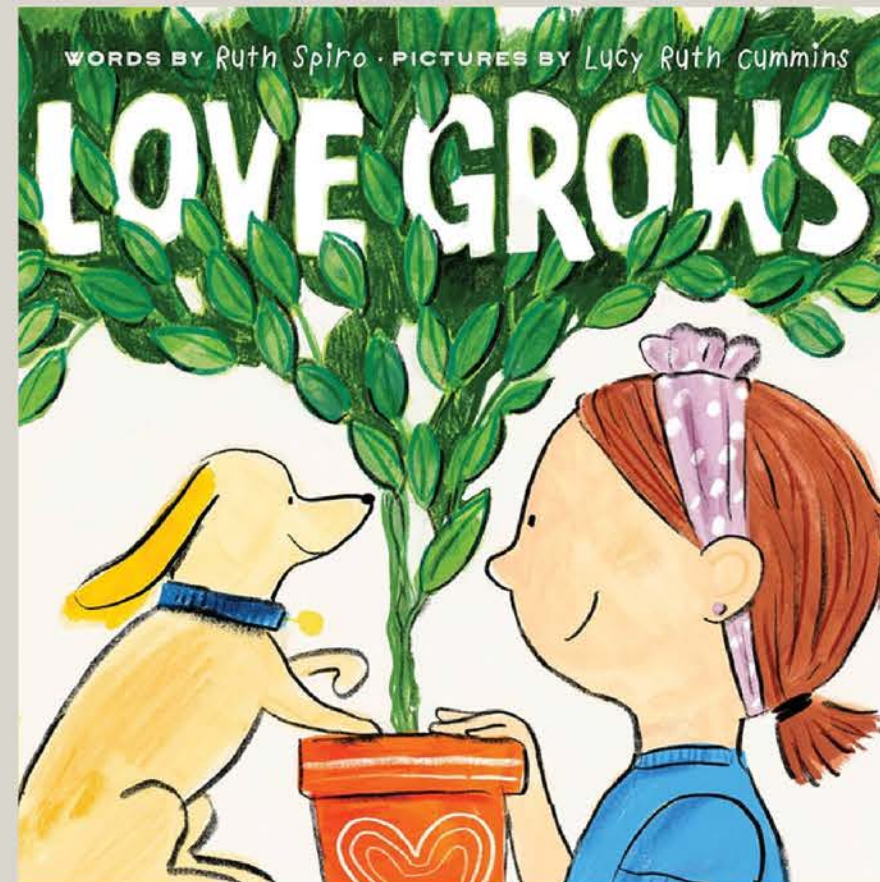
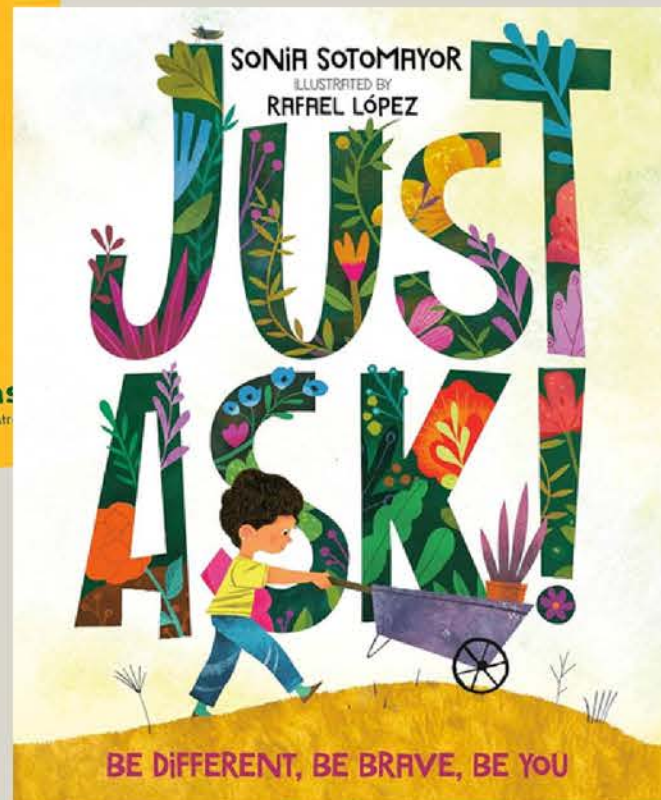
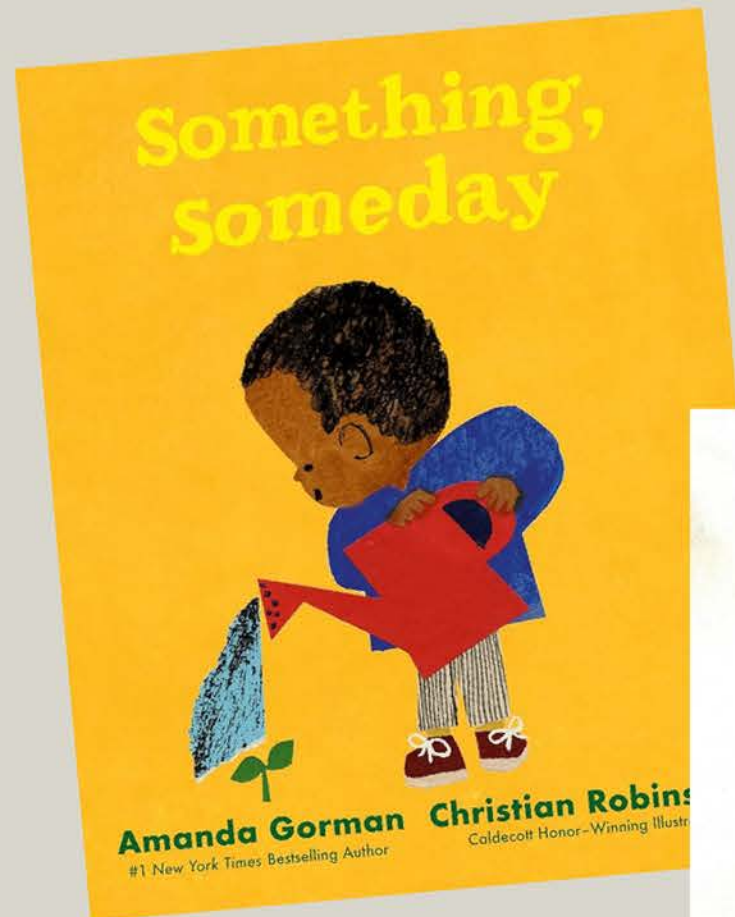


3D Evergreen Tree

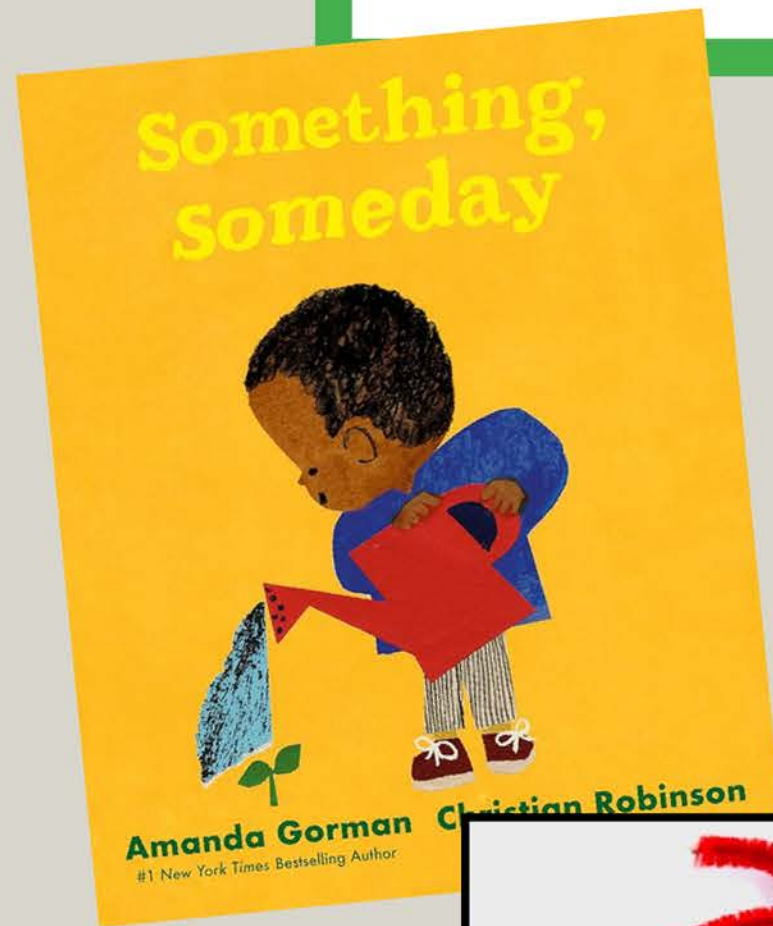


Pinecone Adaptation Experiment

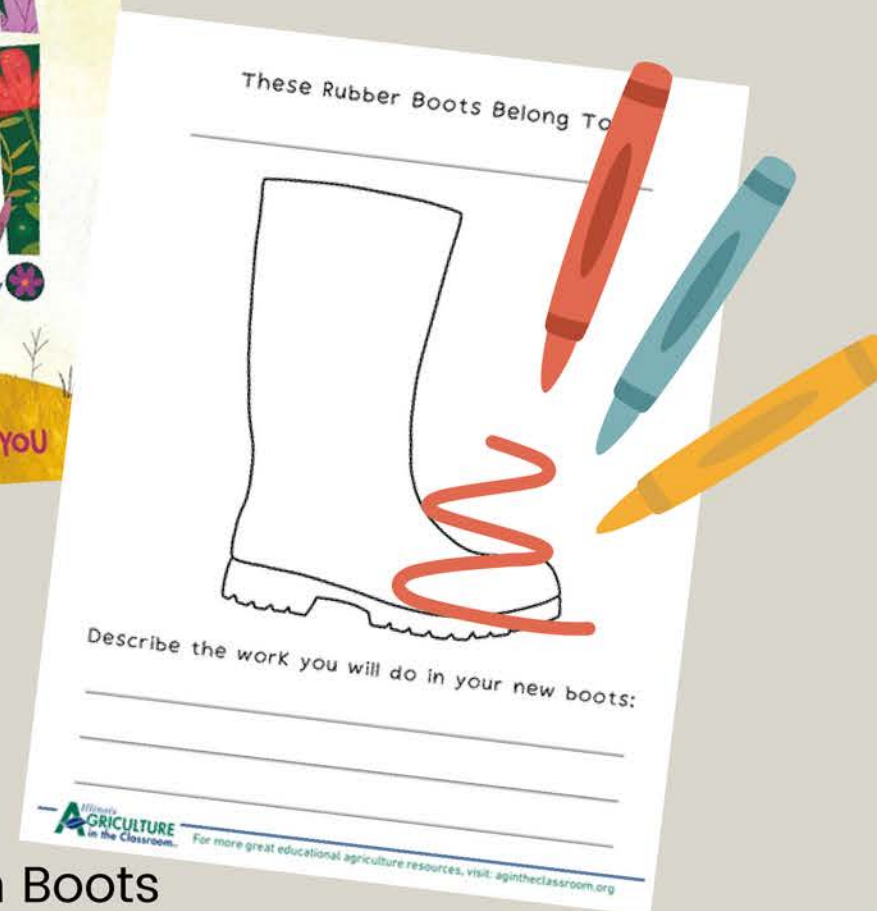
Social-Emotional Learning & Agriculture



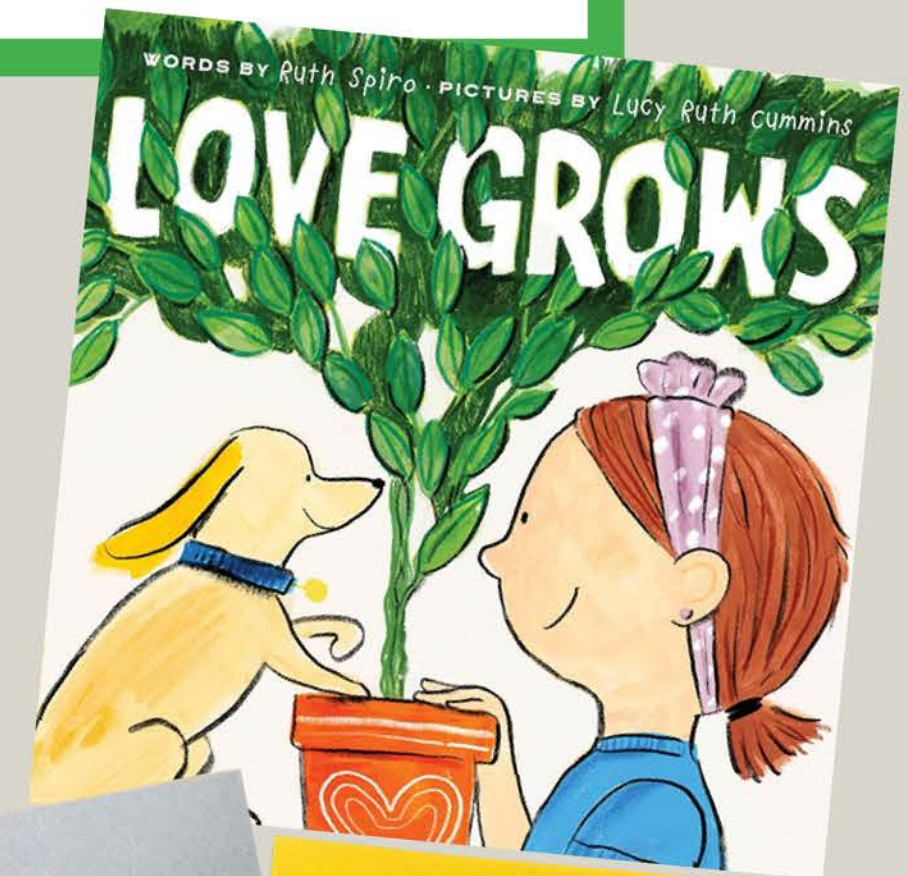
Social-Emotional Learning & Agriculture



Circle of Earth Bracelet

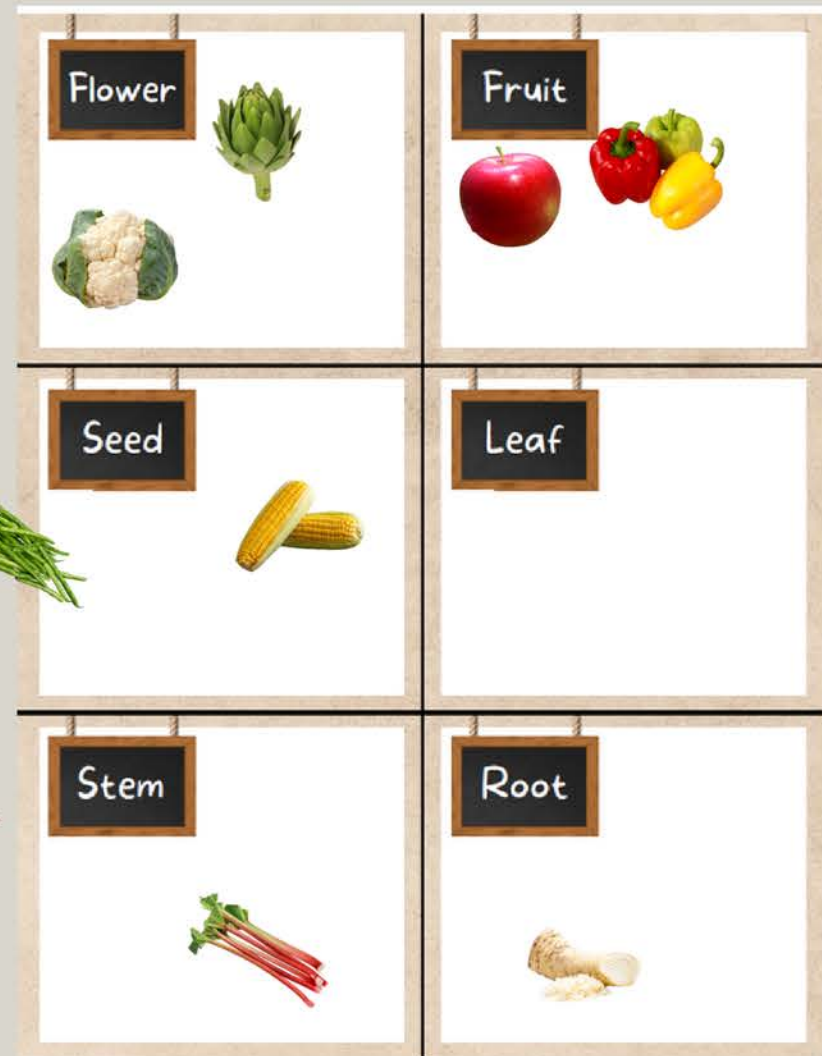
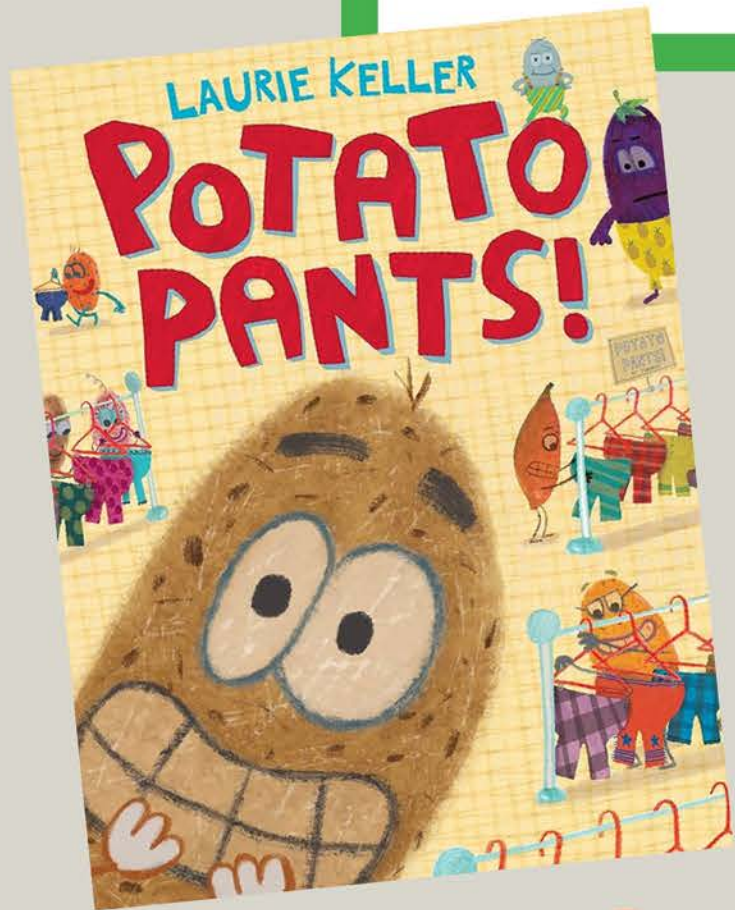


Farm Boots



Growing Letters

Social-Emotional Learning & Agriculture



Plant Parts Matching

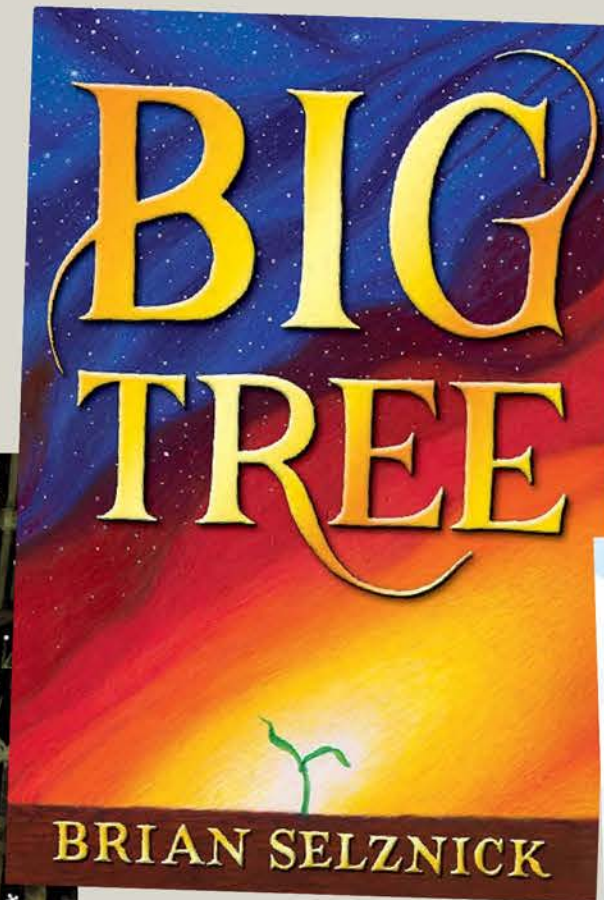
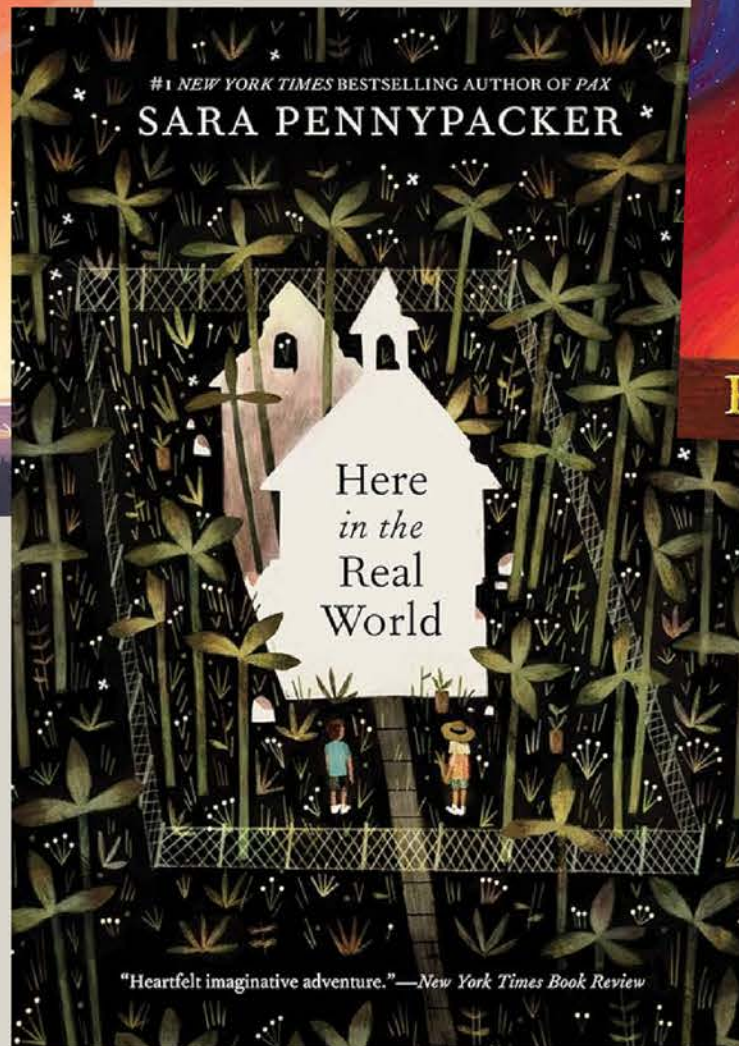
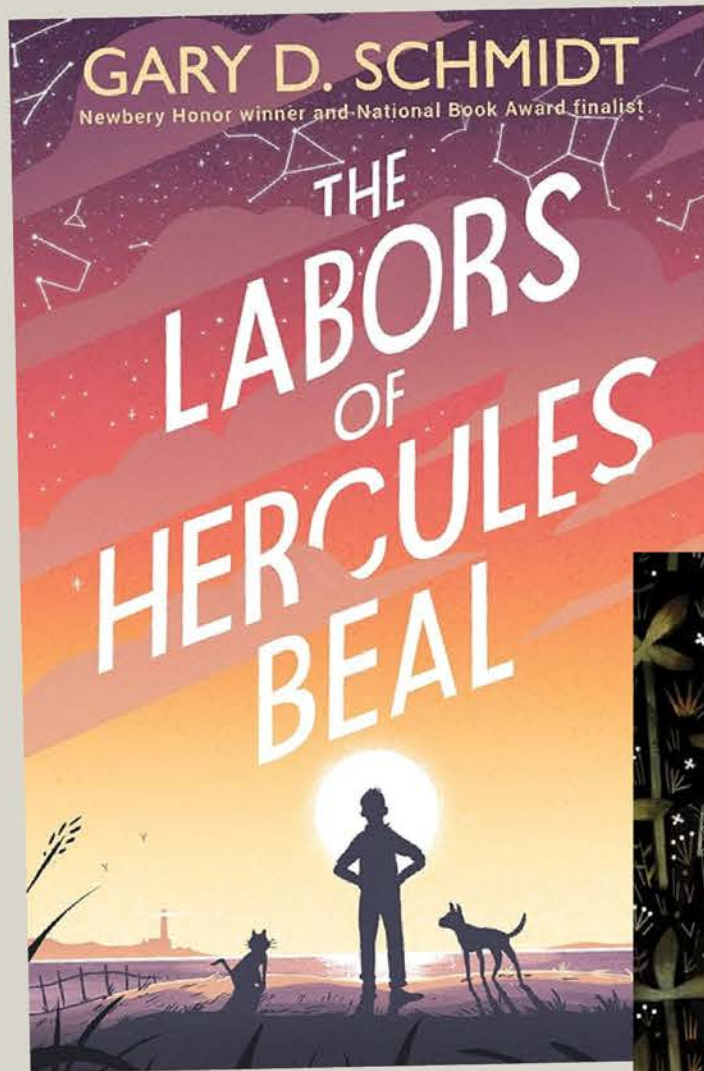


Moo Mask

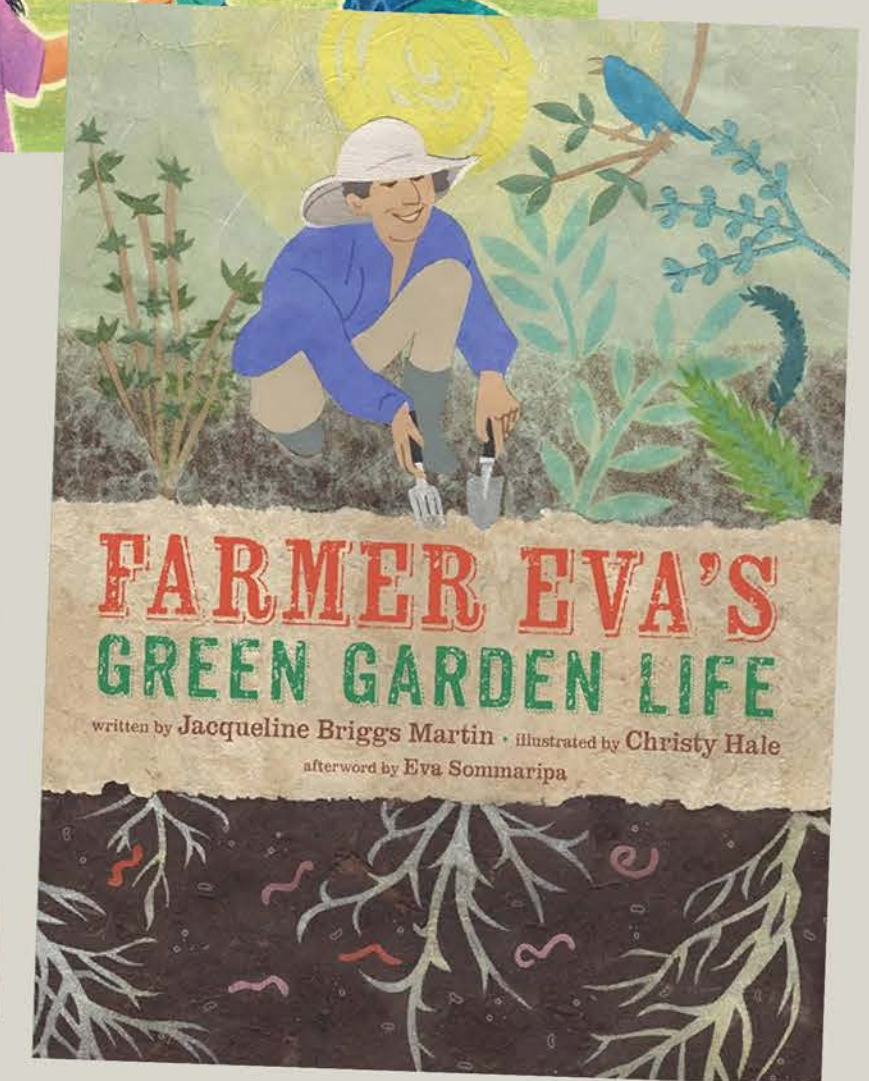
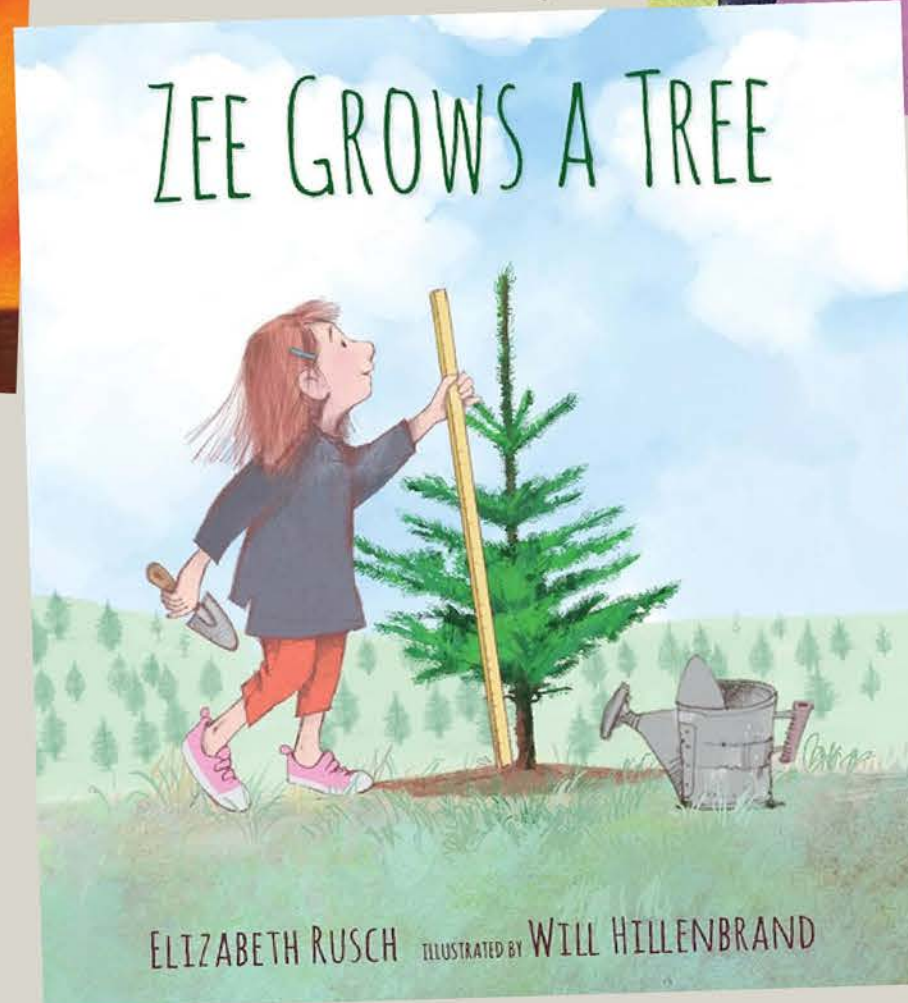
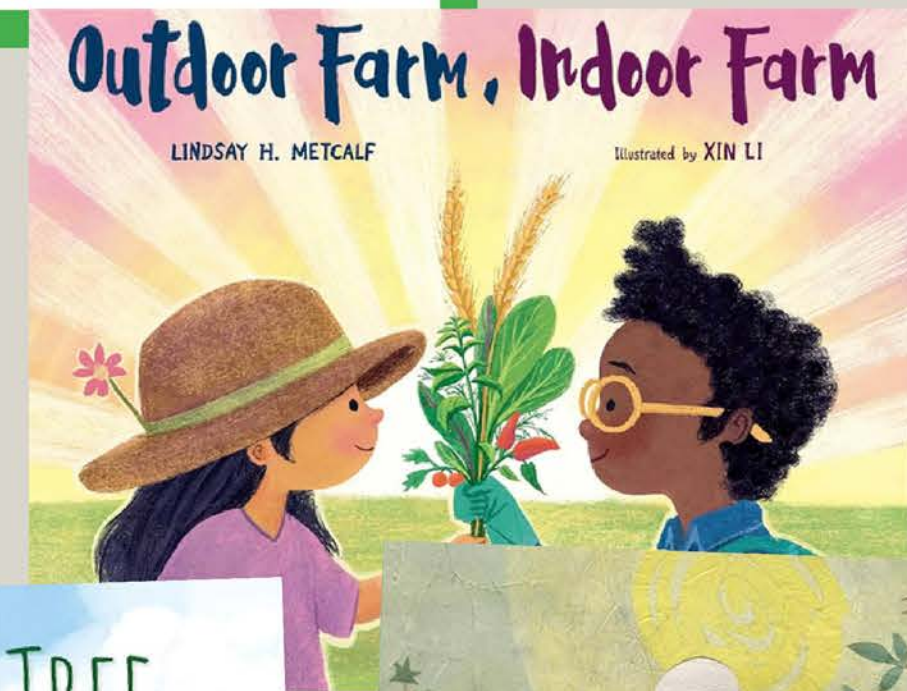


Beautiful Bovine

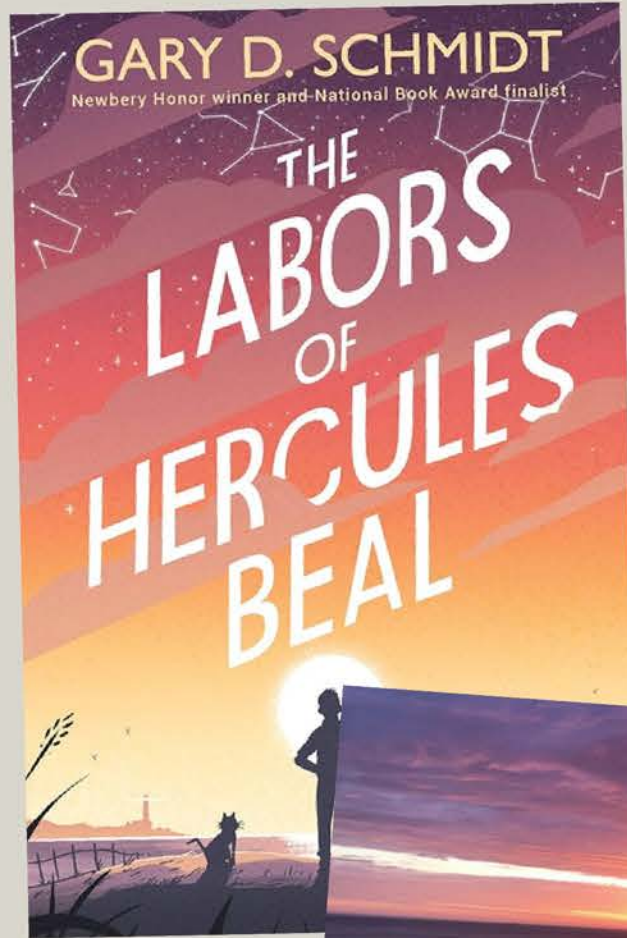
Mythology & Ag



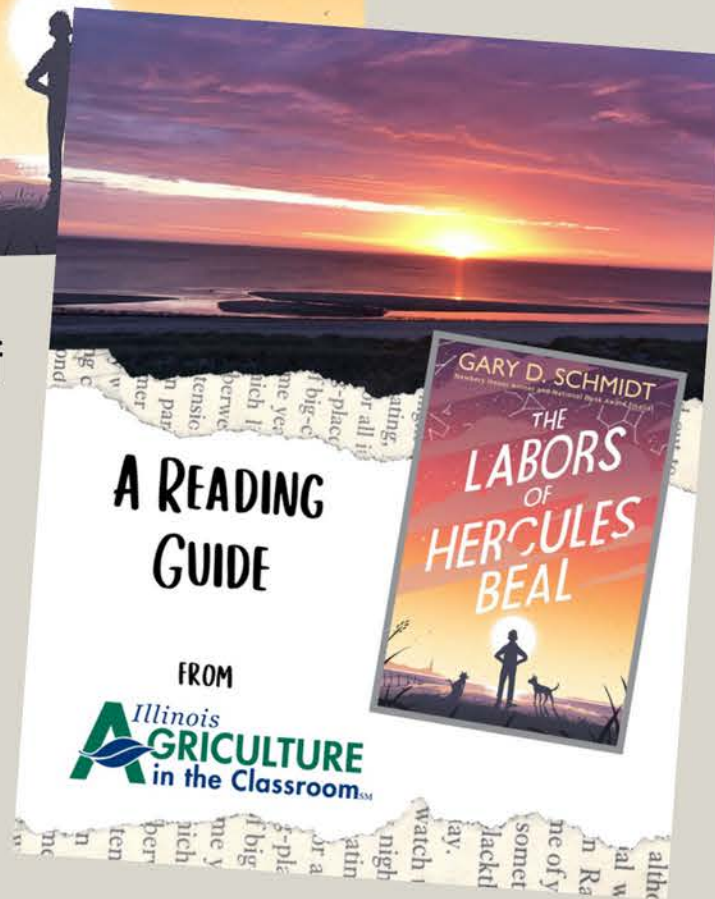
Revisit Tree
Lessons Slide



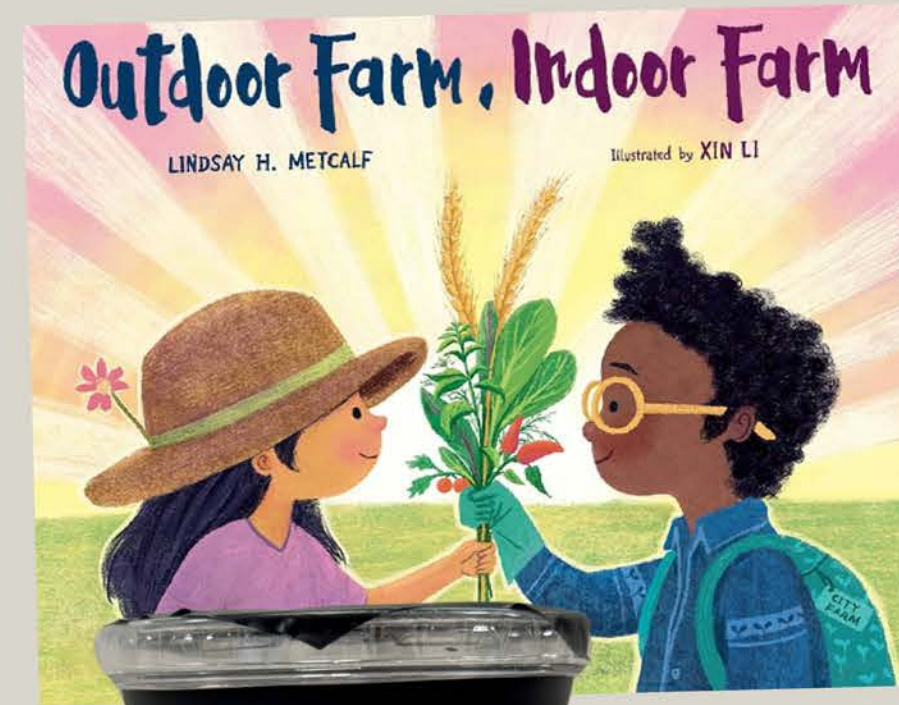
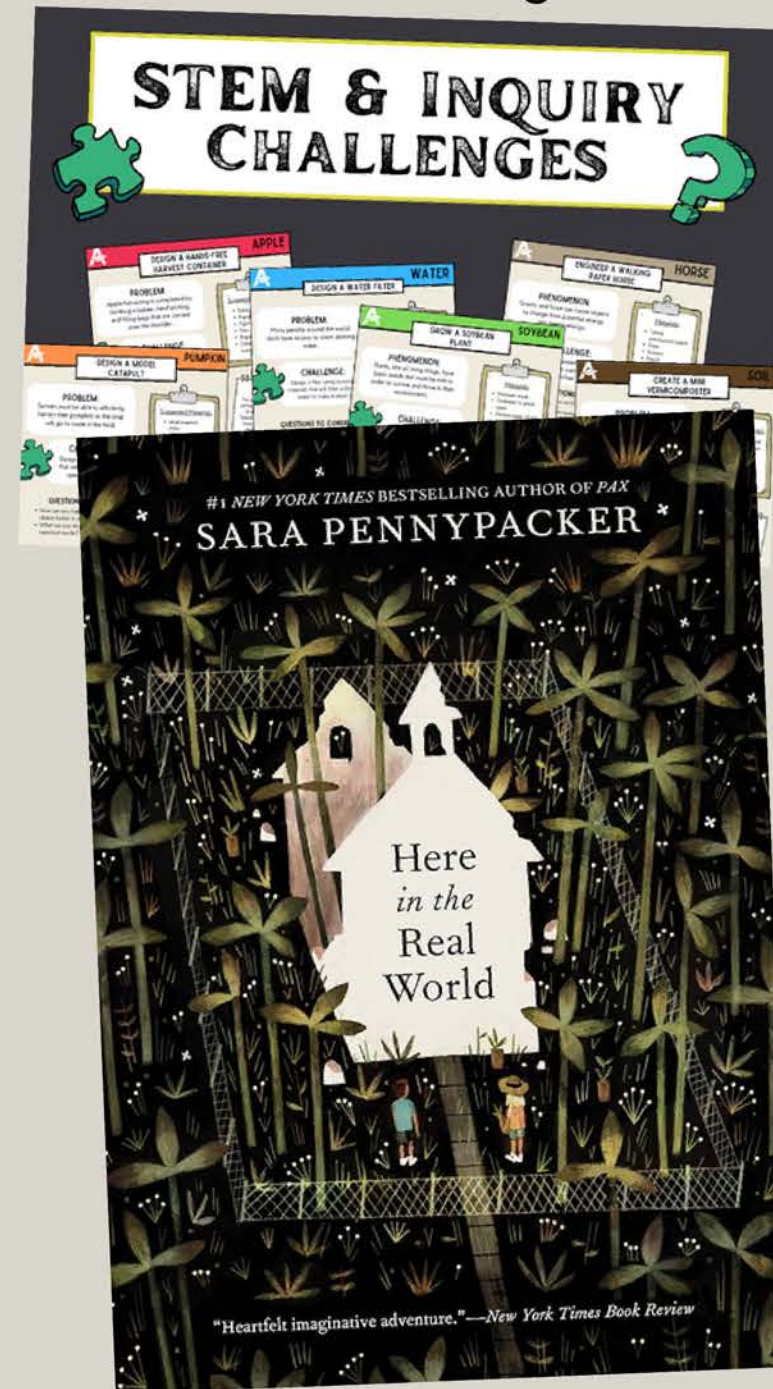
Mythology & Ag



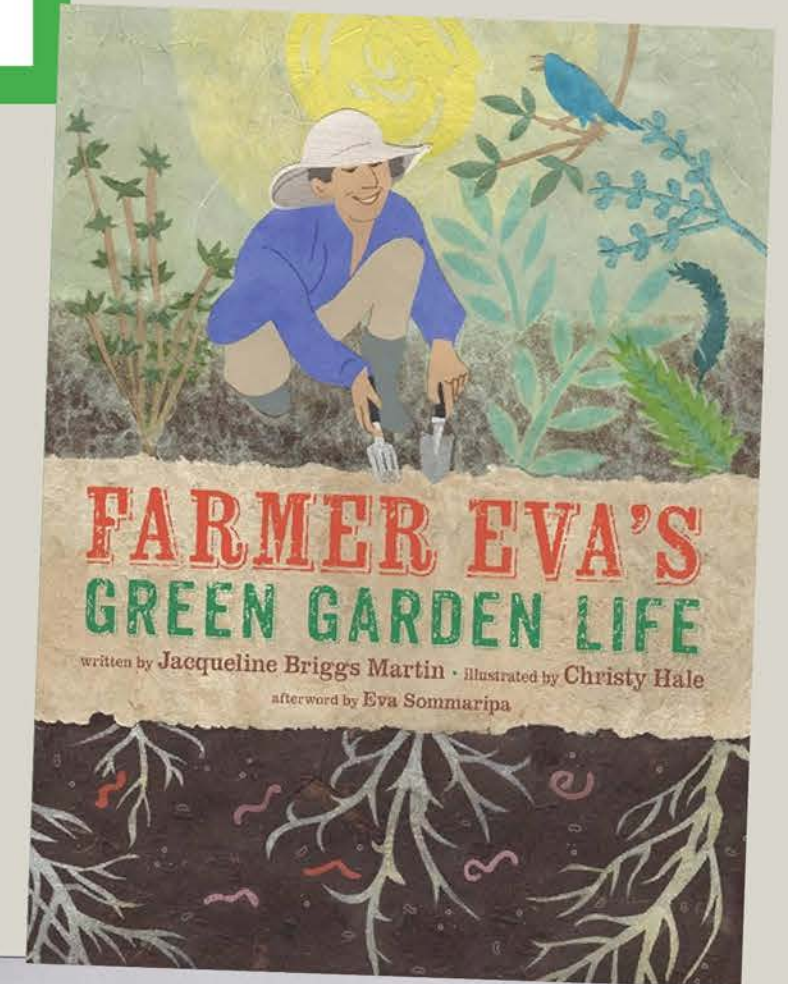
Labors of
Hercules
Beal
Reading
Guide



Design a Community Garden
STEM Challenge



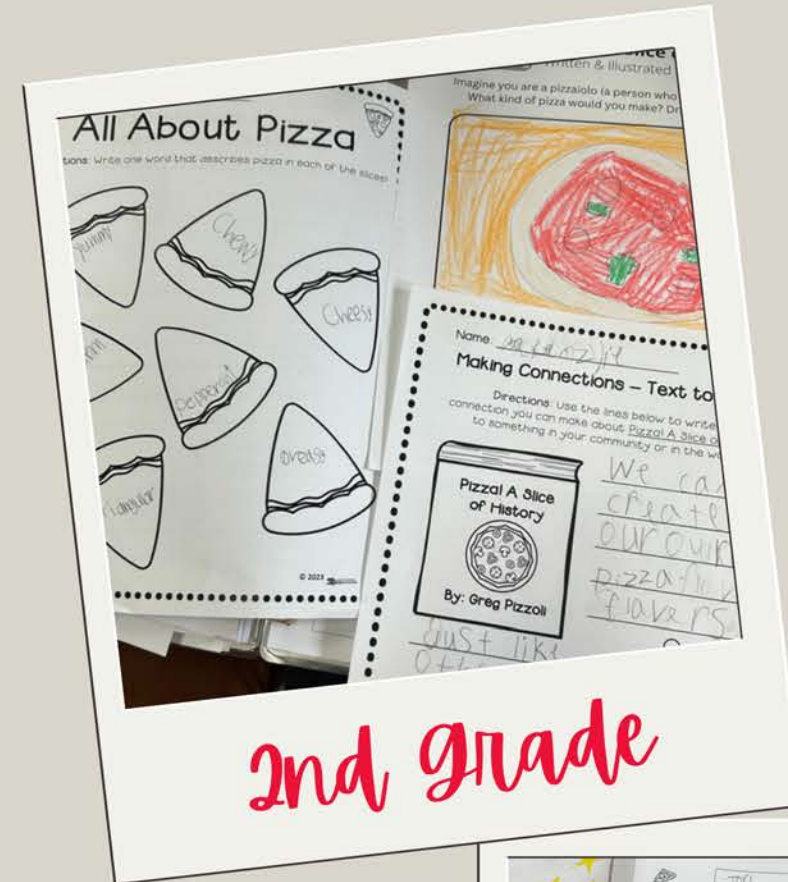
Desktop Greenhouse



Outdoor Adventure Flip Book

Examples of Previous Recipients

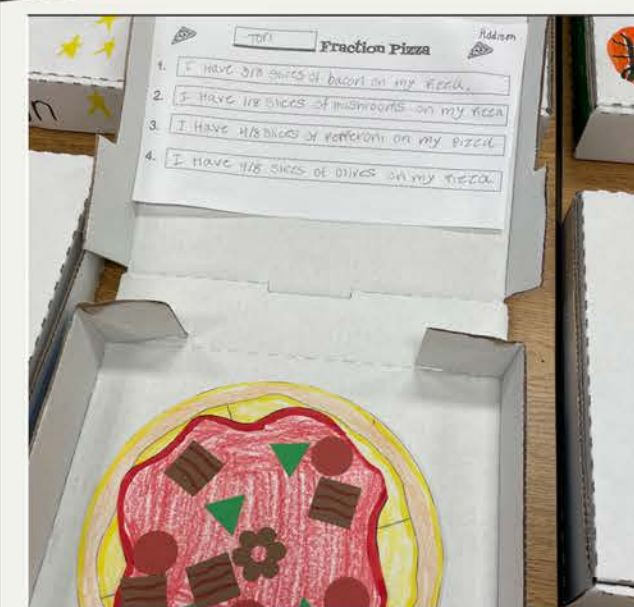
- 4th Grade
- Used "Pizza! A Slice of History" by Greg Pizzoli
- First, students read about the history of pizza. They found Italy on a map and then learned about schools in Italy. Students were amazed to learn how all ingredients come from agriculture and learned how people grow the plants and raise the animals for these ingredients. They invited the owner of a local pizza shop into their classroom to talk to them about his business. He talked to them about the steps to make a pizza and gave each student a certificate for a free pizza to his shop.
- Then, students put their newly learned chef skills to the test and made their own individual pizzas in the school cafeteria using ingredients that were donated by a variety of local pizza shops.



2nd grade



3rd Grade



4th Grade



Examples of Previous Recipients



- Preschool
- Used books from the farming category
- Farm Boots: Students all wore their 'boots' to school, looked at the similarities and differences, and talked about what they used their boots for.
- My Grandpa, My Tree, and Me: Students learned about tree life cycles, parts of trees, and what they need to grow and survive. They helped transplant trees and identify tree parts and even got to see saplings growing from walnuts! Then they learned about foods that come from trees and ate pecan pie.
- Logan's Greenhouse: Learned about flowers, germinated flower seeds with the IATC coordinator, and made flower arrangements for Mother's Day.
- Potatoes For Pirate Pearl: Students learned about potatoes and compared potato chip ingredients/recipes and then went on a treasure hunt using a treasure map to find the gold (potatoes)!



- 2nd Grade
- Used "May Your Life be Deliciosa" by Michael Genhart
- First, students learned about the diversity in their community. After reading the book, students shared their family holiday traditions and used graphic organizers to compare and contrast their traditions with the tradition of the family in the book. Next, students learned about the different types of corn and all the ways we utilize field corn, especially in food. They used descriptive language to describe tamales. Finally, with the help of parent volunteers, students made their own corn tortillas from scratch and ate them with salsa after they were all made!



Examples of Previous Recipients

- Kindergarten
- Used books from the farming category
- Student read through the books and learned about farms and the livestock raised on different farms. They learned about animal life cycles and what "dad", "mom", and baby animals were called. Students also learned about the amount of work that farmers do and what it takes to raise animals. Community members were invited into the classroom to give students the opportunity to see farm animals up close. Students had prepared questions for them. At the end of the unit, students created an informative book about a farm animal of their choosing!



- 4th Grade
- Used books from the soil category
- After finishing their Soil, Rocks, and Landforms unit, students deepened their understanding of soil and erosion by reading the soil books from the Book Grant. Students then used 5 different mediums to grow bean seeds in. After writing their hypotheses on how the seeds would grow in each medium while keeping the light and water consistent. Students made observations, collected data, and analyzed their data, comparing it to their understanding of soil and what plants need to grow. Students also used labeled diagrams to help them identify different plant parts!



Project Grant

The purpose is to integrate agriculture into your spring classroom curriculum! The materials you request should be incorporated into a project, lesson, or unit study in the spring semester.

The Basics:

- Amount: Up to \$300
- Application Deadline: October 18, 2024
- Grant Recipients notified by November 8, 2024

The Important Stuff:

- Funding Agreement completed and signed by December 6, 2024
 - **Forfeit the Grant**
- Final Report due May 30, 2025
 - **Whole school blacklisted**



The Small Print:

Grants should focus on materials that can be used over multiple school years.

No funding for field trips, landscaping, plants, incubators, consumable items.

Examples of Previous Recipients

- 6th-8th Grade
- Grant Materials: 29 Gallon Aquaponics Sprout Garden and a LED grow light.
- The aquaponics sprout garden was set on top of the existing 29 gallon fish tank. Students learned how to set up the system and discussed the needs that both plants and fish need for survival. They learned how the waste from fish becomes the nutrients for the plants. Students collected water samples to test pH levels and collected data throughout the unit, along with making observations of the plant growth. Further class discussion focused on the pros and cons of manmade and natural fish farms, among many other conversations that covered a variety of science standards - life cycles, structure and processes, growth and behavior, flow of energy, etc.



"Class" Photo

- PreK-8th Grade Library
- Grant Materials: Soil, food/nutrition, and Plant books
- Classes visit the library each week and a new book was read to each class when they visited. The local IAITC county coordinator donated some materials to do the Soil Sam activity to help tie in the information from the books to real life. Each class had 2 Soil Sams that they named and 'dressed.' Discussions throughout the semester included topics on agriculture, civilizations, Illinois soil, supply chain and where food comes from (i.e. ketchup from tomatoes, etc.). The Soil Sam activity allowed students to collect data and record that data via charts and completing math equations, and discussed how to change variables in experiments. By the end of the semester, students understood that agriculture is very important to everyone, even if they don't live on a farm.

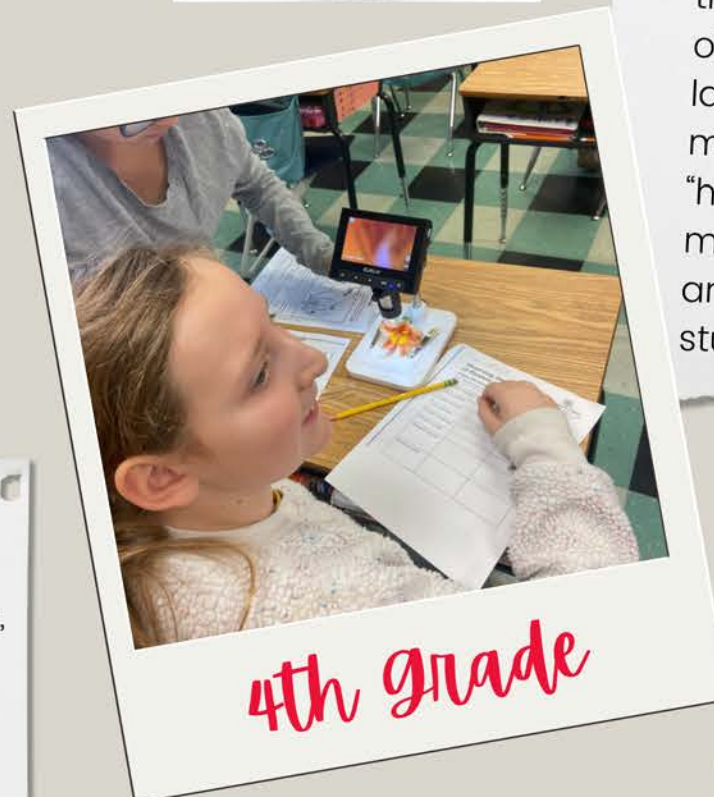


Examples of Previous Recipients

- 6th Grade
- Grant Materials: 18.5 gallon outdoor compost bin, 4.4 gallon indoor countertop compost bin, compost techniques metal sign, "Composting: Nature's Recyclers" book
- The larger compost bin was set up in the school garden area, and the smaller compost bin stayed in the classroom. Students learned about composting and what can and can't go into the bins. They learned how certain materials breakdown over time and add important nutrients to the soil. Students brought food scraps back from lunch and added to the classroom bin. The "One School, One Book" school event introduced the book "How to Eat Friend Worms" and to connect the unit with the school book, students added worms to their classroom compost bin. They learned about all the organisms and microorganisms that live in soil and help break down organic materials. Students made observations each week and compared the outdoor and indoor bins, and after doing some research, they wrote essays using their research/observations as support. Students also were required to discuss the impact of compost bins and worms in the bins in their essays. By the end of the unit, among many other topics, students were able to identify the strengths of each type of bin and what purposes they had in gardening.



- 5th Grade
- Grant Materials: 7 microscopes with digital display
- In the fall semester, students had "planted" underwear in preparation for their soil unit. Students spent almost two weeks reading books on soil and reading through the IAITC Soil Ag Mag. Students also completed more IAITC soil activities: Mighty Macronutrients, Candy Core Sampling, Soil Sleuths, and Slice of Soil. They were able to borrow soil sifters from their local IAITC county coordinator. Students used the microscopes to observe soil composition in general and the composition of the different layers of soil where the undies were "planted". They also used the microscopes to get a closer look at the undies once they were "harvested" which allowed them to also look closer at the various materials the undies are made from. Since this was the first time doing anything like this, many things were learned from the teacher and students on how to improve the unit for future years!



4th Grade

- 5th-6th Grade
- Grant Materials: various dry specimen, insect pins and box, specimen holding fluid
- Students read through a variety of nonfiction and fiction materials to learn about pollinators and various food crop that require pollinators to help. They learned that some crop can be pollinated by other environmental factors like wind. They learned that Illinois is a major producer of various crop like corn, soybeans, pumpkins, and horseradish and the pollination process of those plants. Students focused in on bees and used the "bee box" display as a visual to help increase their understanding!



- 3rd Grade
- Materials to build a small greenhouse around their 3rd grade garden

- High School Foods Class
- Grant Materials: Kitchen scales
- Used scales to weigh different cuts of meat and then completed our "Meat of the Matter" lesson.

Examples of Previous Recipients

Grant Materials: Apple slicer, 6000k LED grow lamp, flexible cutting board set, cookie cutter, popcorn popper, fabric markers, planting cups, crop pot, immersible blender, and mixing bowls

Each club met for 10 or 14 weeks, Mondays and Fridays. Students learned about different countries and holidays from around the world. Students also learned about how food is grown and prepared. We made dishes to sample for each topic.

Session 1: 3rd grade

Week 1- Go over expectations for the club. Discuss what we will be doing. We will begin by finding out what students have experienced with food already.

Week 2- Decorate a fall apron. We will discuss how nature changes in fall. These aprons will be used each week to protect our clothing as we work with food.

Week 3- Dia de los Muertos Part 1. We will discuss the cultures that celebrate Dia de los Muertos and how they celebrate it.

Week 4- Dia de los Muertos Part 2. We will decorate their own skull cookies.

Week 5- Apple butter Part 1. We will discuss different types of apples and their importance in food. We will pre-measure the dry ingredients we will need to make the apple butter next week.

Week 6- Apple butter Part 2. We will peel and slice the apples together. Then we will mix the ingredients together in the crock pot. Students will be able to bring home a container of the apple butter at the end of the day.

Week 7/8 - Corn. We will read The Popcorn Book by Tomie dePaola and discuss the history of corn. We will make the popcorn 2 different ways with the recipes in the book.

Week 9/10 - Pumpkin. We will discuss how pumpkins grow, experiment with pumpkins and water and make No Bake Pumpkin Pie.

Session 2: 4th grade & 5th grades

Week 1- Decorate a winter apron. We will discuss how nature changes in winter. These aprons will be used each week to protect our clothing as we work with food.

Week 2- Winter Wonderland popcorn. We will read The Popcorn Book by Tomie dePaola and discuss the history of corn. We will make Winter Wonderland White Popcorn Mix.

Week 3- Chinese New Year's. We will watch a short video of a Chinese New Year's Parade and discuss how Chinese celebrate their New Year's. We will make our own Rice Krispie Dragon treats.

Week 4- Valentine's Day. We will discuss how Valentine's Day is celebrated and decorate cookies.

Week 5- Melting Snowmen. We will discuss the signs of the seasonal change between winter and spring. We will then make our own Melting Snowman cookies.

Week 6- Bunny Bait. We will discuss a bunny's habitat and needs. We will make Bunny Bait using popcorn.

Week 7- Magic Ramen. After reading "Magic Ramen", students will make their own ramen.

Week 8- Welcome Spring. We will discuss signs of springtime and the different holidays that are celebrated. We will make No Bake Birds Nests.

Week 9/10- Cinco de Mayo. We will read Let Me Fix You a Plate and discuss how different cultures have similar food. We will make Banana Pudding.

Week 11/13- Micro greens. After I attended the microgreens workshop, I decided to use it in our club. Students learned how nutritious microgreens are. We followed the directions to plant and grow them. Two weeks later, we taste tested the microgreens.

Week 12- Rice Krispie Treats. We will talk about how rice is grown and used in different types of cuisine. We will make rice krispie treats.

Week 14- We discussed what we learned, played a game and completed a survey.

Questions???

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