

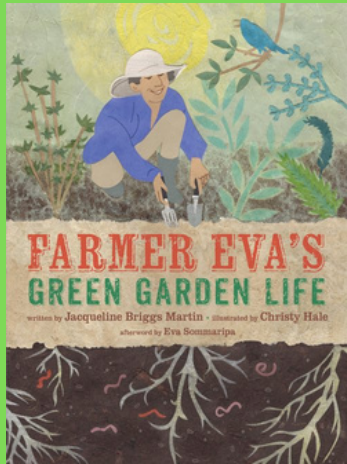
Read ME Educator's Guide

Sponsored by:



Farmer Eva's Green Garden Life

written by Jacqueline Briggs Martin
illustrated by Christy Hale
afterword by Eva Sommarpia



Genre: Children's Biography

Age Range: 6-12

Interest Level Grades: 1-6

Reading Level: 5th Grade

*Reading level based on the Spache Readability Formula

Themes: Biography, Women's Studies, Agriculture, Lifestyles around the world, Ecology, Environment/Nature, Science, Friendship

Synopsis

The fifth of author Jacqueline Briggs Martin's award winning "Food Heroes" series, Farmer Eva's Green Garden Life is a picture book biography about the pioneering female farmer Eva Sommarpia. Jacqueline herself was raised on a family farm in Maine!

Eva Sommarpia founded Eva's Garden in South Dartmouth, Massachusetts, a place "so close to the ocean, she can smell the sea, so close to woods she can talk to trees." More than 50 years later, she has grown a big green garden life of friends and neighbors, creatures that crawl, fly, and slither, and microbes that create rich soil in the brown underground. Meet farmer Eva, and share the magic, beauty, and science of life on the farm and caring for the land.

Vocabulary

microbes, nutrients, roots, pollinators, compost, chaff, decaying, migrating, slither, inspected, wonders, buffet

This story contains several content-specific and academic words and phrases that may be unfamiliar to students. Based on students' prior knowledge, review some or all of the vocabulary below. Encourage a variety of strategies to support students' vocabulary acquisition: look up and record word definitions from a dictionary, write the meaning of the word or phrase in their own words, draw a picture of the meaning of the word, create a specific action for each word, list synonyms and antonyms, and write a meaningful sentence that demonstrates the definition of the word.

CCSS Reading Standards
Craft & Structure, Strand 4

CCSS Language Standards
Vocabulary Acquisition & Use, Strands 4-6

CCSS Speaking & Listening Standards
Comprehension & Collaboration, Strands 1 and 2



Before Reading

Prereading Focus Questions

Before introducing this book to students, you may wish to develop background knowledge and promote anticipation by posing questions such as:

What does it mean to be a gardener?
What types of things may a gardener grow?
Have you ever grown food to eat or share?

CCSS Reading Standards
Craft & Structure, Strand 5
Integration of Knowledge & Ideas, Strand 7

CCSS Speaking & listening Standards
Comprehension & Collaboration, Strands 1 and 2



Exploring the Book

Talk about the title of the book. Then ask students what they think this book will most likely be about and whom the book might be about. What do they think might happen? What information do they think they might learn? What makes them think that?

CCSS Reading Standards
Key Ideas & Details, Craft & Structure, Strand 5
Integration of Knowledge & Ideas, Strand 7

CCSS Speaking & Listening Standards
Comprehension & Collaboration, Strands 1 and 2

Setting a Purpose for Reading

Have students read to find out about how people can create connections with one another when they share an experience.

Encourage students to consider why the author, Jacqueline Briggs Martin, would want to share this story with young people.

CCSS Reading Standards
Key Ideas & Details, Strands 1-3

After Reading

After students have read the book, use these or similar questions to generate discussion, enhance comprehension, and develop appreciation for the content.

Literal Comprehension

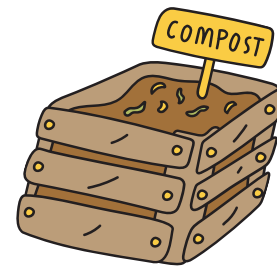
1. Where does Eva live? What is her home like?
2. What does Eva grow for the chefs?
3. What kind of compost does Eva make?

CCSS Reading Standards

Key Ideas & Details, Strands 1 and 3

Speaking & Listening Standards

Comprehension & Collaboration, Strands 1-3
Presentation of Knowledge & Ideas, Strand 4



Extension/Higher Level Thinking

1. What do the author's descriptions help you understand about the sights, sounds, smells, etc. on the farm?
2. What is the significance of 'the brown underground' in this story?
3. Describe the mood at the farm when Eva hosts her annual Longest Day Summer Potluck.

CCSS Reading Standards

Key Ideas & Details, Strands 2 and 3

CCSS Speaking & Listening Standards

Comprehension & Collaboration, Strands 1-3
Presentation of Knowledge & Ideas, Strand 4

Imagination

with author **Jacqueline Briggs Martin**

Write or draw a garden that you would like to work in with family and friends. It can be a space on the ground, a garden box, or just a large pot.

What would you like to grow?

Would you like to grow food that you and your friends could eat? Perhaps a salsa garden with tomatoes, peppers, cilantro? Or flowers to attract butterflies and bees?

Would you include a comfy chair or two in your garden?

Imagination

with illustrator **Christy Hale**

Draw and write about something personal that you want to grow. A talent? A friendship?

Think of how farmers plant seeds and tend their plants. What will be your strategy?

You have been granted the power to create one plant with magical powers. Describe the plant you create. What does it look like? What are its powers? Tell a story about how you or someone else was able to use this plant and its powers.

Activities



Shake, Rattle & Roll

Description: Students determine the importance and complexity of the Earth's soil. Grades K-2.

Materials:

- Flour
- Sugar
- Water
- Glass jar with lid
- Soil
- Permanent marker
- Ruler
- Paper towels

Directions:

1. Explain that soil is made of three different types of particles: sand, silt and clay. The perfect soil will contain an even mixture of all three.
2. Give each student a sample of sugar, representing sandy soil. Have the students describe the texture. Next, allow students to feel dry flour and rub it between their fingers. This is the powdery, silky texture of silt. Finally, add a small amount of water to the flour. This is the texture of clay.
3. Fill a large jar half-full with soil. Fill the remaining space with water. Have the students take turns shaking the jar until the clumps are broken apart. Let the jar sit for two minutes. Use a marker to draw a line to mark each layer. The top layer will be clay, the middle layer will be silt, and the bottom, sand. Allow at least 24 hours for the soil to settle completely. Have the students identify the thickest layer to determine the soil type.



Working Worms Jug

Description: Students observe how earthworms speed the decomposition of organic matter and identify how this adds nutrients to the soil that are important for plant growth. Grades 3-5.

Materials:

- 1 clear plastic gallon milk jug
- 2 plastic plates, 1 with holes
- Gravel
- Bedding mixture: shredded paper, peat moss, grass clippings, vacuum cleaner bag, debris, leaves, dryer lint, etc.
- Water
- Earthworms
- Chopped fruit and vegetable scraps

Directions:

1. Cut the top from a clean, clear plastic gallon jug. Poke holes for drainage in the bottom of the jug. Make sure you have a plastic plate under the jug to collect excess water. Poke small holes in the side of the jug for air flow.
2. Add 1in of gravel for drainage. If you provide shredded newspapers and carefully watch the moisture content in the worm jug, you can omit the gravel.
3. Poke holes in a plastic lid or plate and place over the gravel. Add 1in of bedding mixture on top of the plate and then add earthworms.
4. Sprinkle some fruit and veggie scraps on top of the worms.
5. Cover with more bedding material. Sprinkle with water, making sure bedding is moist, but don't soak!

Activities



Growing Microgreens

Description: Growing microgreens is a quick, easy, and tasty way to explore the seed germination and plant growth life cycle. Grades 3-5.

Materials:

- Soil (Peat-based potting soil works well for microgreens)
- Microgreen seeds (Kale, broccoli, and pea shoots are excellent microgreens to grow in any classroom)
- Containers (Many types of trays or growing containers work well for growing microgreens. Shallow "to-go" containers are a great, inexpensive option.)
- Water (Spray bottles work well for watering microgreens)

Directions:

1. Fill container with soil
2. Add water to the soil and mix water into soil evenly.
3. Make soil flat and then spread seeds throughout the container. Press the seeds into the soil for good seed to soil contact.
4. Check seeds and soil daily. Place your finger in the soil and water when needed to keep the soil moist.
5. Harvest microgreens when you see a set of first true leaves. For most microgreens, this is approximately 10 days after planting.
6. Eat and enjoy! Microgreens can be added to salads, sandwiches, and pizza. Experiment with eating microgreens on some of your favorite foods!



Garden Imprinting

Description: Students explore living and nonliving things and experiment with visual arts techniques through an examination of texture in the natural world. Grades 3-5.

Materials:

- Paper or resealable quart bag, 1 per student
- Modeling or ceramic clay, 1 small ball per student
- Vegetable oil spray (optional)

Directions:

1. Provide each student with a paper or resealable bag. Ask students to collect 10 items that feel different from one another. Instruct students not to show each other what they've collected.
2. Divide the class into two groups arranged so that they cannot easily see each other's work spaces.
3. Instruct students to sort the items they have collected into living, nonliving, and once-living groups.
4. Ask students to pick the item that has the most interesting texture to make a clay imprint with. Placing the items on a piece of newspaper and spraying them with vegetable oil will make it easier to remove them from the clay.
5. Ask each group to place their clay imprints in a line and label them with numbers.
6. Allow time for groups to examine each other's imprints. Instruct the students to write down their best guesses for the identity and classification of each item.
7. Have the students return to their seats. Go through the imprints one by one, discussing students' guesses for the identity and classification of each item, and then revealing the actual item. Discuss any differences between the guesses and the actual items and how the textures of the items affected the quality of the imprints.



Eat a Rainbow



Description: Students will learn about the health benefits of eating a variety of fruits and vegetables. Grades 3-6.

Materials:

- Plant part chart (online)
- Chalkboard and chalk or dry erase board and markers
- Variety of fruits and vegetables representing different colors
- Small cups
- Toothpicks
- Napkins
- Knife and cutting board



Directions:

- Introduce the concept of eating a rainbow. Explain how different colors of fruits and vegetables indicate that they contain different vitamins, minerals, and phytonutrients
- Lead an informal discussion about fruits and vegetables the students like, those they don't like, and those they've not tried. As they talk about various foods, encourage them to use descriptive words such as "sweet," "tangy," or "spicy" rather than "yucky," "okay," or "awesome."
- Set up a chart on your whiteboard or chalkboard with colored markers or chalk similar to the one linked online. Ask students to help fill in the blanks with names of vegetables and fruits that you have obtained that match these colors. (Ex - Pineapples and Peppers for yellow, Blueberries and Grapes for blue/purple, Tomatoes and Strawberries for red, etc. Adapt based on availability for your class)
- Introduce students to the idea of a tasting activity by telling them there are people in the world who have the job of sampling new vegetable and fruit varieties before the seeds are sold to gardeners and farmers, or testing foods that companies package for market. Tell them they'll be playing the role of food tasters during the tasting activity, and like real tasters, will rate flavors, using descriptive words as mentioned above. They'll also note if they'd be willing try each food again.
- Clean fruits and vegetables thoroughly. Cut each item into bite-sized pieces as necessary. Provide toothpicks, paper cups, and napkins for students to use during the tasting.
- Fill in the classroom chart with the comments from the students. Take a vote on whether each student will try the fruit or vegetable again.

Lessons



Full versions of these lessons can be found on the [Agricultural Literacy Curriculum Matrix](#), which is linked under “Resources” on the MAITC website. They have been designed by the National Center for Agricultural Literacy, and are aligned with Common Core and NGSS.



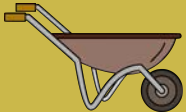
People and Plants Need Nutrients: Grades K-2

Students determine that although plants and people obtain nutrients differently, they both need proper amounts of nutrients to grow and be healthy.



Vermicomposting : Grades K-2

Students create a worm bin which will serve as a basis for investigations about ecosystems, life and nutrient cycles, and decomposition.



How Does Your Garden Grow?: Grades 3-5

Students synthesize what they know about soils, plants, and the environment to plan a garden, present their plans, and explain why they made the decisions that they did.



Exploring Texture in the Garden: Grades 3-5

Students explore living and nonliving things, determine how nonliving resources help sustain plant life, and experiment with visual arts techniques through an examination of texture in the natural world.



Color in the Garden: Grades 3-5

Students use the art of soil painting to explore science and the natural world while learning about the color wheel, the importance of soil to agriculture, and why soils have different colors.

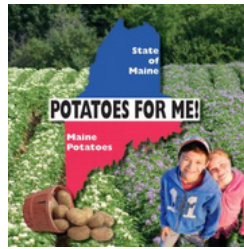
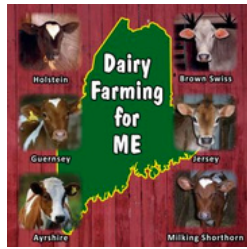
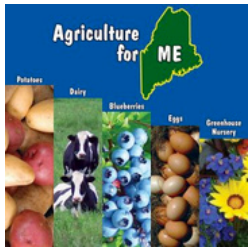


The Incredible Edible Soil: Grades 3-5

This hands-on lesson allows students to explore the composition of soil and why it is so important, looking at different soil samples and then building their own edible “soil.”



Funding from this specialty license plate has helped to create 6 books about Maine agriculture that are available online for your smart board, iPad, or computers at www.TeachMEFoodandFarms.org/resources. You will find activity sheets and lessons for each one there, too!



ANSWERING YOUR QUESTIONS

How can I find local farms and farmers to visit our class or take field trips to? At www.realmaine.com you can find a full searchable listing of farms, fairs, and farmers markets!

How can I find funding for Agricultural field trips? Maine Ag in the Classroom (MAITC) offers \$1,000 grants annually. Check the website for details. www.MaineAgintheClassroom.org

How can I find information on school gardens? MAITC works closely with the Maine School Garden Network to provide workshops, information, and mentors for school gardens. Check their website www.msgn.org for more information. We suggest joining their newsletter and attending Maine School Garden Day this spring!

How can I find funding for educational projects related to agriculture? There are one year grants for Ag Leadership, Ag Awareness, and School Gardens and Greenhouses on our website. Since 2008, we have awarded \$60,000 annually thanks to the agriculture specialty license plate.

How can I connect agriculture to my classroom curriculum? Lessons and activities on our website and curriculum matrix are aligned to state and national standards. MAITC holds teacher professional development workshops including a week-long [Summer Teachers Institute](#) where curriculum resources are distributed to teachers and 6-36 contact hours are awarded by the University of Maine.



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To continue our Read ME Program, we need your input! Please fill out our online evaluation:

