

2025

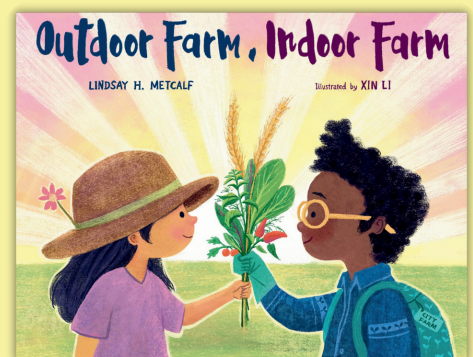
Agriculture Literacy Week Volunteer Kit

Volunteer Directions

Enclosed you will find tips and tools to help you have the best possible reading experience. In addition to the resources in this kit, you may visit Virginia.Agclassroom.org for a sample introductory letter to schools, as well as a template for book donation labels. Each of these can be edited and personalized.

Table of Contents

1. Volunteer Tips and Reading Guide - includes discussion topics and background knowledge.
2. Activity: Water Bottle Hydroponics
3. Activity: Venn Diagram
4. Activity Pages - featuring coloring, a maze and word search.
5. Learn More - scan the QR codes for virtual visits to Virginia farms similar to those featured in the book. Students may also write their own pen pal letters to AITC.



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Virginia.Agclassroom.org

Volunteer Tips & Reading Guide



Prior to Your Visit

The book is best suited for preschool through second grade students. Contact a local school and introduce yourself as well as the project. A sample introductory letter, which can be personalized, is available at Virginia.Agclassroom.org. Be sure to schedule well in advance, as most teachers plan several weeks ahead of time. Your visit will likely last approximately 30 minutes.

Gather any supplies you may need, including copies of activity pages, if desired. Children enjoy any kind of “show and tell” items that you may be able to bring. Your show and tell does not have to be specifically mentioned in the book, but could be related to your personal farming operation/connection.

Because of the popularity of this program, we encourage you to collaborate with other agriculture organizations in your area to coordinate reading and encourage visits to as many different classrooms as possible.



Introduction

Introduce yourself to students and share your connection to agriculture. Tell them that today you will be reading a story of two pen pals, each with different types of farms.

Emma lives on a traditional grain farm that grows crops like wheat and other grains on large fields.

Efrem’s family owns a farm that grows food (lettuce) inside using a technique called aeroponics.

Tell students that while the two farms look very different, each uses technology and hard work to provide us with food. Invite them to consider the similarities and differences of the two farms as you read.

Volunteer Tips & Reading Guide



Discussion & Extension

After reading, ask what questions they have. How were the farms similar and different? You may also choose to discuss some of the points below.

Plants need nutrients to grow. Typically plants get the nutrients they need from soil. When plants are grown without soil, the nutrients must be added. The indoor farm in the book uses aeroponics; that is when a nutrient solution is misted onto bare roots. The most common type of indoor farm uses hydroponics, this is when the plants' roots are submerged in water enriched with nutrients.

Sometimes farmers with outdoor farms need to feed plants additional nutrients as well. GPS and drones, like the one used by Emma, can tell farmers exactly where to fertilize and how much.

Virginia has both traditional grain farms like Emma's as well as indoor farms like Efrem's. You can scan the QR codes in the "Learn More" section for videos visiting both types.

Enclosed in the Volunteer Kit are student activity pages as well as classroom activities to accompany the book. You may choose to do any, all, or none based on your allotted time.

We recommend leaving the book, as well as the newsletter and information card about Agriculture in the Classroom that were included in your order, so that the teacher may access supplemental resources from AITC.

Water Bottle Hydroponics

Create your own hydroponic growing system to investigate seed germination!



Directions

1. Cut the top off of your water bottle just underneath where it begins to curve upwards.
2. Mix your liquid fertilizer according to package directions and then fill the bottom of your water bottle.
3. Invert the top of the water bottle (with the cap off) into the bottom.
4. Place a large cotton ball (or other growing medium) into the hole and stretch the cotton so that it is touching the water solution in the bottom.
5. Place 1-2 seeds on the top of the cotton ball and observe growth over the next 1-2 weeks.

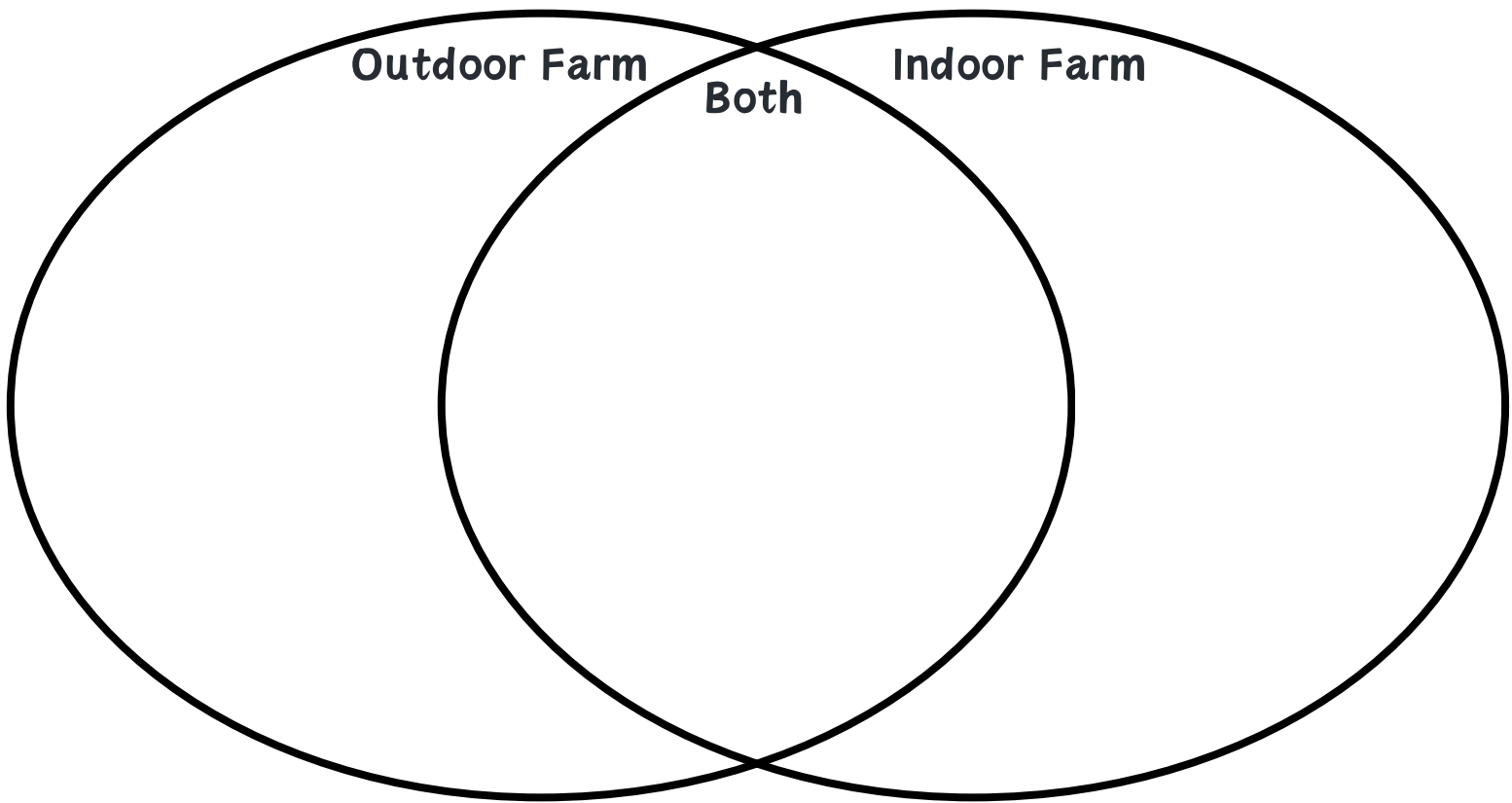
Supplies

- scissors
- plastic water bottles
- seeds
- water
- cotton balls (larger size recommended) or other growing medium such as rock wool
- liquid fertilizer, such as Floragro



Compare and Contrast

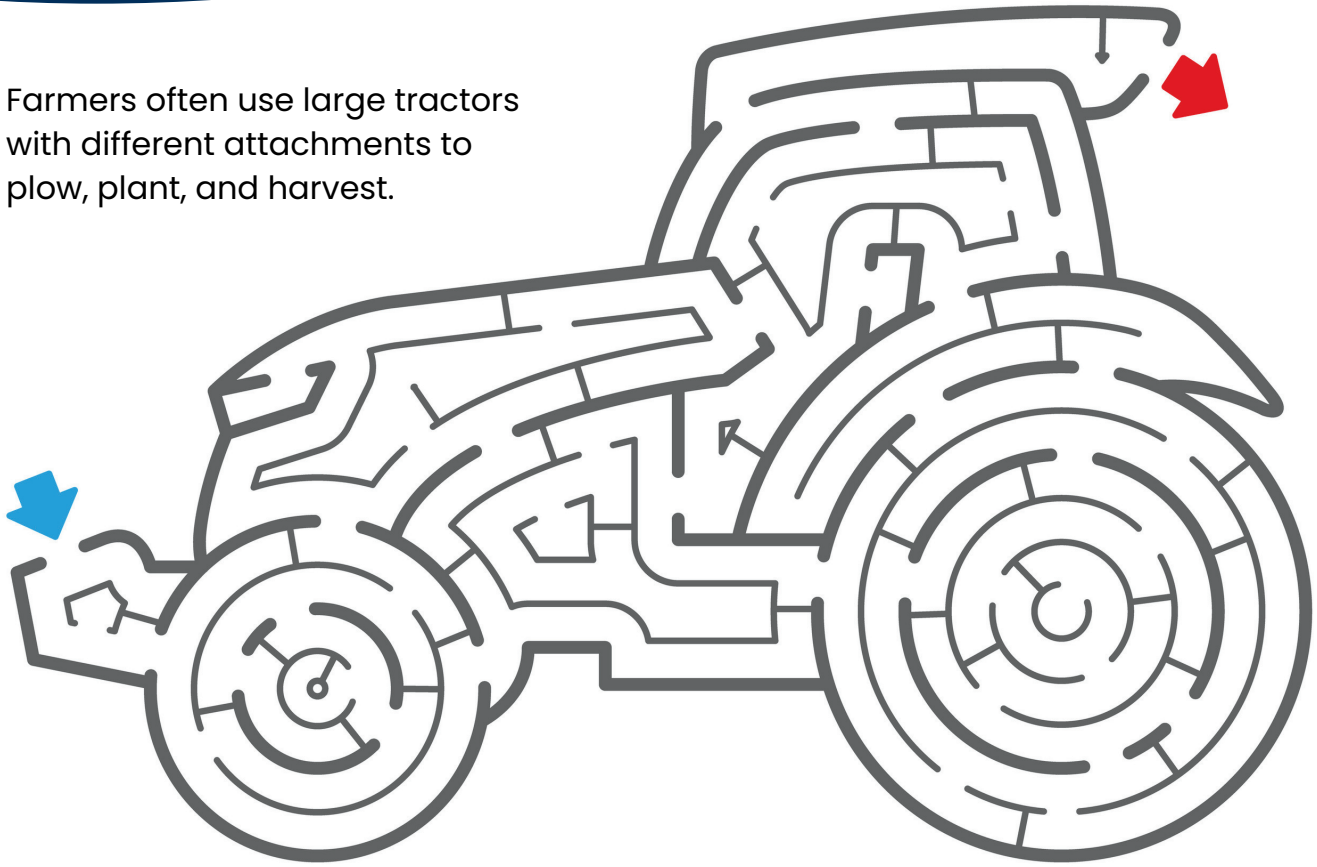
Cut out the clues at the bottom of the page and glue into the correct spot on the Venn Diagram.



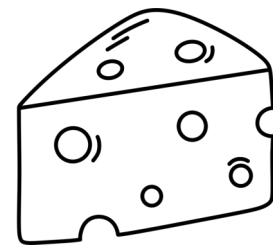
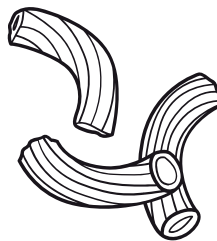
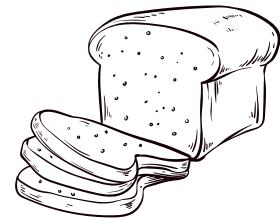
Plants do not grow in soil.	Technology is used.
Farmer uses a tractor.	Plants grow in soil.
Plants need water.	Artificial light is used.
Food is grown.	Crops like wheat are grown.

Activity Page

Farmers often use large tractors with different attachments to plow, plant, and harvest.

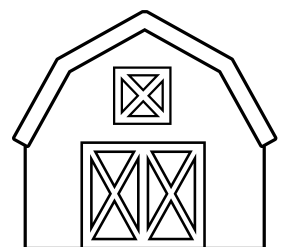
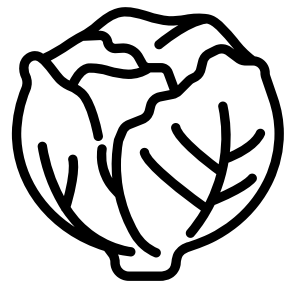
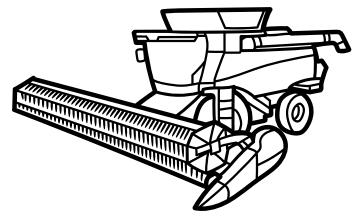
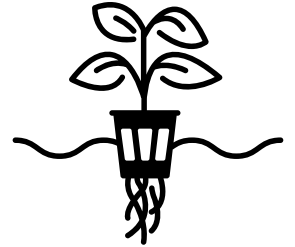


Emma's outdoor farm grew wheat. Find and circle all of the products below that are made with wheat.



Word Search

M E C U T T E L Y Q
 A R S W W P F V J H
 F U A H J E T S A U
 N I E F B R T R E U
 P A J M A O V G V P
 T I Z C O E V N S W
 D I T R S Q B S X A
 I O Y T E N O R D T
 R S N B B R I K A E
 I M M D M L I O S R



farm	drone
wheat	lettuce
soil	sun
water	tractor
roots	harvest

Learn More

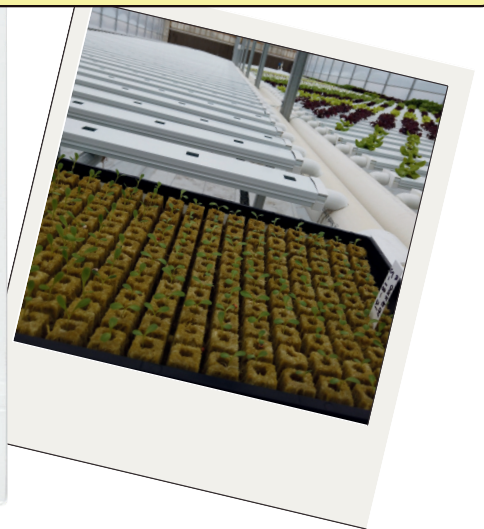
Virginia has both traditional grain farms like Emma's as well as indoor farms like Efrem's. Let's visit farms of both types!



Take a virtual tour of Shore Breeze Hydroponics on Virginia's Eastern Shore and learn how lettuce is grown hydroponically.



Lettuce seeds are planted in rock wool cubes. Once the seedlings are big enough they are moved to channels where nutrient enriched water is continually cycled.



Learn More

Virginia has both traditional grain farms like Emma's as well as indoor farms like Efrem's. Let's visit farms of both types!



Meet Savannah from Hanover County whose family grows corn, wheat, and soybeans.



Planting corn, wheat, and soy in a rotation helps maintain good soil health. The corn you see here is dent corn and will be used for animal feed.



Your Turn

Tell us what you thought about the book and something new you learned. Letters can be mailed to AITC at 12580 West Creek Parkway / Richmond, VA 23238. We'd love to hear from you!

Dear Agriculture in the Classroom,

**Thank you for
connecting
children to
agriculture!**



**804-290-1143
aitc@vafb.com**



Virginia.Agclassroom.org