



STANDARDS ADDRESSED

Georgia Agricultural Education Standards:

3AS1. Relate the importance of how food is produced, handled, prepared and stored in order to protect the safety and nutritional value of the food.

3FA1. Describe how agriculture impacts your daily life.

Next Generation Science Standards:

5-LS1-1 From Molecules to Organisms: Structures and Processes. Support an argument that plants get the materials they need for growth chiefly from air and water.

Comprehension Check

1. What purpose does soil serve for a plant? How does a hydroponic farm provide for those needs without soil?
2. What equipment is used on a hydroponic farm?
3. What is one way to keep food safe?
4. How long does it take Farmer Alexis to grow a head of lettuce?
5. What are some words that describe the tasks that Farmer Alexis does?

Extension Activities

1. Complete a venn diagram comparing and contrasting traditional farming and hydroponic farming. How are they different? How are they the same?
2. Draw the unique leaf of each variety of lettuce that Farmer Alexis grows: red oak leaf, green oak leaf, butterhead bibb, romaine. Remember the ABCD's of scientific drawings: accurate, big, colorful, detailed.
3. Visit your school cafeteria, local grocery store or farmers market. Make a list of all of the varieties of lettuce you can find.
4. Create a model to show how water flows through a hydroponic farm. How does that compare to how water might cycle on a traditional farm through either rain or irrigation?

Key Vocabulary

Hydroponics - a way to grow plants without soil, by using nutrient solutions in water

Greenhouse - a structure that controls the climate and conditions for the plants growing inside

Germinate - to grow, for a tiny seedling to crack through its seed casing and sprout

Transplant - to move a plant from one place to another



CHALLENGE

Where is Farmer Alexis's farm?

Reflection Questions

1. What are your favorite ways to eat lettuce?
2. What would you like about being a hydroponic farmer?



COMPREHENSION CHECK ANSWERS:

1. Nutrients, through a water solution
 2. Greenhouse, tubes, trays, gloves, tanks
 3. Wash hands, wear gloves
 4. 6 weeks
 5. Seeding, transplanting, picking, packing, delivering
- Challenge** Dublin, Georgia

