



KALE

HISTORY

Like other members of the Brassicaceae family (broccoli, Brussels sprouts, cabbage, cauliflower and kohlrabi), Kale originated in the northern Mediterranean region and breeding of the wild plant started around the 6th century BCE. It was brought to the United States from England in the 17th century. Kale is a very hardy plant; it can withstand frosts and snowfall, making it an excellent staple food in the winter months.

FUN FACTS

Kale has more than twice the Vitamin C of an orange. Some varieties of kale grow to be 7 feet tall.

Kale comes from the same plant family as broccoli, brussels sprouts, and cabbage.

Kale has been cultivated for over 6,000 years.

FARMER BIO

Kevin and Kate O'Dwyer own Langwater farm - 86 acres of farmland across three different properties. They grow just

about every vegetable you can imagine including salad greens, garlic, melons, pumpkins, and potatoes. They even grow popcorn! Another crop they grow is kale and their favorite is Lacinato, also known as Dino Kale. They just love that rich, dark green color. Langwater sells their products at their farmstand on Rt. 138 in Easton, at several farmers markets: Attleboro, Brookline, Somerville, and Roslindale, and even at the Providence Wintertime Market. They have a CSA [Community Supported Agriculture] and they also sell to many local

restaurants and schools. They donate food every week to the Easton Food Pantry and love feeding their community!



KALE



Grades 3-5 • 30 minutes

OBJECTIVES

Students will be able to identify what plants need to grow and thrive as they plant and observe microgreens.

ESSENTIAL QUESTIONS

What is kale and what are microgreens? Why are microgreens a healthy food choice? What do plants need to grow?

MA STATE FRAMEWORK(s)

3-5 Life Science Standards

- 3-LS1-1
- 4-LS1-1
- 5-LS1-1

MATERIALS NEEDED

Kale Microgreen seeds Seed tray Soil

PROCEDURE

Background: Groups of students will plant seeds, choose a location in the classroom for their plants, and determine how much water their plants should receive. Each week (for 3 weeks) students will complete their growing journal and will compare results with the other groups.

Introduction:

Ask students if they know what the word "micro" means. Explain that they will be growing a plant that is small on purpose. Ask if they have any ideas why a farmer would do this. Explain how microgreens have many nutrients packed into a small plant because they didn't spend their energy producing fruits or seeds. They can also be harvested quickly because they don't need to grow as large as a full size kale plant.

Activity:

Divide the class into groups of 3-4 students and explain the growing challenge. Allow the student groups to choose a location in the classroom they think will be best for growing their microgreens. Let them know they are responsible for deciding how much water their plants should receive. Pass out a tray, enough soil to fill the tray and ½ cup of seeds. Jobs for each group include soil spreader, seed sprinkler, waterer, and placer. Once the students have set up their trays and placed them in a spot around the classroom, have them fill out their journal for Week #1.

Wrap up:

Have students write predictions about their growth rates in their journals. Fill out attached journal questions.

Lesson developed in partnership with: Island Grown Initative

KALE MICROGREENS Name: JOURNAL // Week #1

Date.

What are your microgreens' growing conditions?	
What are your predictions for your microgreens?	
Draw a diagram of your microgreens.	



KALE MICROGREENS Name: JOURNAL // Week #2

ow have your microgreens changed since last week?	
ow have your microareens changed since last week?	
on have year mileregreene enanged emee tast week	
hen do you think your microgreens will be ready to ha	rvest?
Draw a diagram of your microgreens.	
oraw a diagram or your microgreems.	



KALE MICROGREENS JOURNAL // Week #3

Name:

Date:

low well have your microgreens grown?	
ow did your microgreens taste?	
Draw a diagram of vour migrogroops	
Draw a diagram of your microgreens.	

