

Lesson Summary:

This lesson introduces the concept of planting and growing your own food at home. Students will gain awareness of what greens and salads we grow here and how to use those plants in recipes.

Objectives:

Students will be able to...

- Plant their own lettuce/greens in the classroom and then take them home to transfer and grow at home
- How to take care of their plants
- Identify different kinds of greens

Time Required:

30 minutes

Background Information: Lettuce is a cool weather crop that grows well in lower light conditions. It is economical to grow and nutritious to consume. Additionally, lettuce varieties are very diverse offering a wide assortment of textures, flavors, and colors to enjoy.

Lettuce / Leafy Greens:

Two dozen or more types of leafy greens are grown in New York, primarily for fresh market production. According to the 2007 Census of Agriculture, 224 New York farms produced 1,398 acres of lettuce. Leaf lettuce is the most widely grown with 758 acres, followed by 381 acres of head lettuce and 260 acres of romaine lettuce. Lettuce is grown for local sales as well as large wholesale markets in the Northeastern, US.

Other popular greens are spinach (247 acres), collards (96 acres), escarole & endive (75 acres), kale (57 acres), mustard greens (36 acres) and turnip greens (16 acres). Additional types for which no statistical information is available include: arugula, beet greens, bok choy, dandelion greens, radicchio, rapini, swiss chard and watercress.

Field-grown greens are available beginning from May through mid-October (depending on the

FARM TO SCHOOL LESSON PLAN
GRADE OR SUBJECT: 3rd Grade
TOPIC: Lettuce!



type). However, the season can be extended by growing in tunnels protected from harsh winter temperatures.

Lettuces are a cool weather plant. A sunny window and moist potting soil is a perfect start for planting lettuce and greens with kids.

Materials:

- Pots/Planters for each student (we used biodegradable pots that look like cardboard material so you can actually place that pot directly into the ground)
- Gloves (optional)
- Shovels/Trowels
- Dirt
- Sprouted plants or seeds (any variety of lettuce or leafy greens)
- Soil
- Napkins
- Plates/cups for greens
- Variety of greens (optional, taste test)
- Water source/watering cans
- Paper towels
- Markers/Tape (label your pot)
- Brown paper bags (to put your pot in to transfer home)
- Optional: Book: *Garden to Table: A Kid's Guide to Planting, Growing, and Preparing Food* by Katherine Hengel

Procedure:

1. Today we are talking about local greens and how to grow them! Growing your own food is easy and fun to do.
 - a. Ask kids about gardening at home. Who gardens at home? What do you grow?
 - b. What do plants need to grow? (water, light, soil, nutrients, space)
 - c. Talk about local greens that you will be planting.
 - d. Briefly explain the process of planting.
2. Planting:
 - a. Have stations set up with soil, cups, plants, trowels, gloves.



FARM TO SCHOOL LESSON PLAN
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- b. Students will each receive one pot, fill half full to $\frac{3}{4}$ full with soil, plant your lettuce plant in the dirt. Use fingers to secure plant in pot.
- c. Students put their plant in paper bag and label with their name.
- d. Students take home the plant to tend. Tell students to:
 - i. Remove plant from bag
 - ii. Ask parents where they can put it. Ideally, in or near a window out of reach of pets and small children.
 - iii. Water once a day, about a half a cup. Ask an adult for help.
 - iv. Students can do the finger test to see how damp or dry the soil is to adjust the watering accordingly.
 - v. Students can transfer their plant outside in the ground or in the garden upon permission from parents or guardians.
 - vi. Take scissors and trim the lettuce leaves after they get about 5" tall. Yes, you can eat them! The lettuce will continue to grow back and you can harvest the plan all summer long!
 - vii. If you let the lettuce get too tall, it will taste bitter.
3. Tasting station: Students can make kale chips with their class or teacher can make them ahead of time to taste. See appendix I. for recipe. Or students can just try different varieties of greens such as kale and sunflower chutes, spinach, etc. (can purchase from McCollum Orchards in Lockport or a farmer's market) Be sure students wash their hands after planting.
4. Optional: Hand out copies of growing guide to students

Assessment:

Class discussion

Supporting Materials:

- Growing Guide
- Appendix 1: Kale Chips Recipe

References/Resources:

Book: Garden to Table: A Kid's Guide to Planting, Growing, and Preparing Food by Katherine Hengel
<http://www.gardening.cornell.edu/homegardening/index.html>
<https://www.gardeningknowhow.com/special/children/how-plants-grow.htm>
<https://kidsgardening.org/lesson-plans-lettuce-be-healthy/>
<https://cyp.cce.cornell.edu/>



Appendix I. Kale Chips

1 bunch kale

1 tablespoon olive oil

1 teaspoon seasoned salt

Optional: other seasonings to your liking

Directions

- Preheat an oven to 350 degrees F. Line a non-insulated cookie sheet with parchment paper.
- With a knife or kitchen shears carefully remove the leaves from the thick stems and tear into bite size pieces. Wash and thoroughly dry kale with a salad spinner. Drizzle kale with olive oil and sprinkle with seasoning salt and your seasonings of choice.
- Bake until the edges brown but are not burnt, 10 to 15 minutes.
- Let cool and enjoy!



INDOOR LETTUCE EASY GROW GUIDE

The infographic shows four stages of lettuce growth in pots, each with a corresponding instruction box below it:

- DAY 1:** Shows a magnifying glass over three seeds. Instruction: Use shallow 3-inch pots or seedling tray. Cover the seeds with 1/3" of soil. Keep the temperature around 60F/16C.
- DAY 7:** Shows a small sprout in a pot. Instruction: Place the sprouts behind a window or under a grow light. Keep the soil evenly moist but not wet.
- DAY 25:** Shows a larger seedling in a pot. Instruction: Transplant into 1/2 to 1 gallon pots when the seedlings are 3" tall. Start fertilising with half doses at first.
- DAY 40:** Shows a fully grown head of lettuce in a pot. Instruction: Lettuce grows much faster after it reaches a certain height. Start picking the outer leaves and leave the rest on the plant so it can develop further.