



BIG GREEN LESSONS

Seasonality: 3rd – 5th Grade

Lesson Outcomes

In this lesson students will identify cool versus warm weather crops.

- Plants in our Learning Garden grow best in either warm or cool weather.
- Develop a list of ingredients needed for their ultimate salad.

Standards Alignment

Next Generation Science Standards

- 3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some less well, and some cannot survive at all.
- 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction.
- 5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.

Common Core – English Language Arts

- SL.3.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.
- SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- SL.3.6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
- SL.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly
- SL.4.3. Identify the reasons and evidence a speaker provides to support particular points.
- SL.5.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
- SL.5.3 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.



Materials and Preparation

- Warm and Cool Weather Crops, print or display on board
- Ultimate Salad Ingredients, *optional*
- Blank white paper
- Coloring materials
- Review lesson and familiarize yourself with your Learning Garden
- *Optional:* supplies for additional Learning Garden activities

Teacher Background

In gardening we plant during two main growing seasons: warm and cool. The warm and cool weather growing seasons provide a time for you to grow different types of crops in your Learning Garden. Each region of the country will have their own parameters on what months of the year are considered cool or warm weather growing seasons. Many regions will have a winter season with cold temperatures and snow where crops cannot grow outside in your Learning Garden without additional protection, however, in some regions, you can grow year-round!

Growing crops in the appropriate season means they will taste better and grow bigger because they are receiving adequate warmth and sunlight. In addition, purchasing produce from your local grocery store while they are in season will ensure you are receiving the freshest and tastiest produce!

Review USDA's Seasonal Produce Guide for more general information:
<https://snaped.fns.usda.gov/nutrition-through-seasons/seasonal-produce>

Introduction

Spend time discussing the following introductory questions:

- Describe the four seasons
- What effect does temperature have on growing plants?
- Do plants have an optimal temperature for growing?

Activity

1. Welcome your students to the Learning Garden and line students up along one side of the Learning Garden. Stand on the opposite side of the Learning Garden so you can address the entire group.
2. Ask students if they know what they will be doing in the Learning Garden for the day's lesson. Let them know they will be learning about warm weather plants and cool weather plants!
3. Invite your students to explore the Learning Garden and to look for plants they can identify. Give students 3 to 5 minutes to explore the garden. Once finished, bring students back together and review their findings.



4. Have students raise their hand and share what plants are currently growing in the Learning Garden. If students cannot identify all of the plants help them identify the rest of the plants. While they are sharing, create a list that will be used inside the classroom.
5. Return inside to the classroom and have the students return to their desks. Write or post the list of Learning Garden plants on the board for everyone to see. Let your students know you will now be identifying if a crop is a warm or cool weather crop.
6. Distribute the Warm and Cool Weather Crops list and give students 3-5 minutes to review the list. Let the students know they will use this list to decide if a Learning Garden crop is a warm or cool weather crop.
7. Have students raise their hand and select a Learning Garden crop and share if they think it is a warm or cool weather crop. Help guide students through the list of crops and make sure each crop is correctly identified.
8. Based on the knowledge they just learned students will now be asked to create their ultimate salad!
9. Pass out a blank piece of paper to each student, let them know they will now be drawing a picture and labeling the ingredients of their ultimate salad. Provide students with a copy of the Ultimate Salad Ingredients if they need extra support.
10. Give students 15 minutes to complete their drawing and remind them to label each ingredient. Once each ingredient is labeled have students circle the salad ingredients, or fruits and vegetables, that they can grow in your Learning Garden.
11. Instruct students to label each circled fruit and vegetable in your salad with either "warm" or "cool" to indicate that it grows best during the warm season or cool season.

Conclusion

Have students share key parts of the day's activity and review the Lesson Outcomes.

Students should clean-up the Learning Garden as needed.

Additional Learning Garden Activities

Extend your Learning Garden experience and have your students participate in any of the following Learning Garden activities as appropriate.

Activities can include planting, watering, weeding, and harvesting.

