

Grades 3–8 • 45 mins • Fall, Winter, Spring, Summer • Outdoor

NEW!

GRADES 3–8

SCHOOL PARTNER  
LESSON PLAN

SUBMITTED BY

Jane Madden • jane.madden@discoveryhsf.org

## ? ESSENTIAL QUESTIONS

- What is seasonality?
- What crops grow in our region in (current season)?
- What is currently growing in our garden and where is it growing?
- How can a map of our garden help us?

## MATERIALS

- Clipboards
- Pencils
- Garden Map
  - A map of your garden, with landmarks to help orient students, a clear system for naming garden rows or beds, and places to write, draw, and label crops. You may need to create different maps for different grade levels and/or you may want to assign different areas to classes or small groups depending on the size of your garden. Be sure to include a space to record the date and season to reinforce the concept of seasonality.
- Student Binders
  - Students should add work to their garden binder (grades 5 and up).

## Abc VOCABULARY

- Seasonality
- Region
- Orient
- Crop

## ASSESSMENT

- Completed Maps
- Students can name 3 crops growing in the garden and the season

## PREPARATION

Ensure signs are in place for each crop in your garden. Designate names for each bed (letters, numbers, colors, shapes, whatever you choose). Create a map of your garden for the specific grade level and photocopy it for each student. (This map can be used several times throughout the year to document the changes in the garden through the seasons). Place photocopies on clipboards for each student.

## TEACHER BACKGROUND

The educator will need to understand basic concepts of seasonality, know the layout of the garden and how to orient students to the garden, explain to students that they may need to turn the map as they move through the garden to accurately record the location of each crop. It will also be helpful to have a completed map of the garden and know the number of different crops that are growing.

## LESSON DESCRIPTION

Students' agenda: Opening question and discussion. Work independently or with others to locate and record crops growing in the garden on a map. Come together to name the crops growing as a whole group. Harvest from the garden. Recognize themselves and others through appreciations or shout-outs.

## LEARNING OBJECTIVES

**Content Learning Objectives**

*Weather and Season, Climate and Geography*

**WSCG.4.1** Understand and describe how geographic place and cultural significance might influence what and when foods grow in your location.

**WSCG.6.1** Describe the growing climate and seasons of your school/home garden.

**WSCG.7.2** Demonstrate knowledge of seasonal gardening.

**Life Skills Learning Objectives**

*Personal Life Skills*

**PLS.1** Students are self-aware and show respect for their own needs, the needs of others, and the environment. They practice safe and conscientious behaviors in the garden and kitchen environments.

**PLS.2** Students are able to express empathy and caring for themselves, others, and the environment.

**PLS.3** Students cultivate honest and responsible behaviors that contribute to the learning of the community.

*Community Life Skills*

**CLS.4** Students appreciate and are respectful of differences and diversity in their communities

## ACADEMIC STANDARD CONNECTIONS

**CCSS.ELA.4.SL.1.** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse patterns building on others ideas and expressing their own clearly

**NGSS Science and Engineering Practice:** Obtaining, Evaluating and Communicating Information.

*Lesson Sequence**Engage***Cultivate Curiosity (10 mins):**

Students are seated in small groups or partners, choose a structure for your discussion, it can be a timed pair share, round robin, or student led whole group discussion (described below).

Opening Question: “Today we will create and label a map of our garden, think of how we could use this map, what are the different ways a gardener or farmer might use a map of their growing space? There are many possible answers, I am excited to hear your ideas. Let’s think for a moment before we share our ideas.”

Pause for thinking time then say: “Now we get to share our ideas. You are going to lead the discussion, here is how: I will choose the first speaker, they will choose the next speaker by selecting someone who has their hand up and listened while they were speaking. Remember, we’d like to hear from as many voices as possible so please allow others to answer if you’ve already had a turn. Be sure to listen closely because your classmates might build on your answer or share something you hadn’t thought of. What do you think—should we have a hand up while others are speaking or wait until they are finished?”

Facilitate speaker selection process if needed, choose students to record a list of ideas if desired, praise for great listening and contributions to the discussion.

Once all ideas have been expressed, explain: “We will be able to use the map we create in many ways. One way it will help us is (something you might have mentioned already—it will show us what is growing in our garden right now, right here in our region) it will help us understand seasonality—everyone say seasonality—raise your hand if you can describe what it means. (allow for a few answers) Seasonality is a big concept that we will learn about this year—it includes what grows well at what time of year in a specific place or region. We’ll be exploring seasonality throughout our classes in the garden. Let’s get to the mapping!”

Ask students to fill in Name, Date, and Season on your Map Handout, our hand out had our region listed as South East Louisiana. Finally, line up with clipboards and pencils and move to the garden.

*Explore* **Root Around (20 mins):**

Travel to the garden and have students stand shoulder to shoulder looking toward the garden. Orient students to the map by using a landmark on the map, then by asking all students to point to each row when you name it. Then check for understanding again by doing the opposite, you point to a row and on cue all students call out the name of that row. Model how to label the crops on the map, where to write or draw on the map and point out the signs that you are gathering the information from. If needed move to another location opposite where you are standing so students understand that if they change their vantage point they need to move the map, also explain that you can always go back to the first vantage point if needed. Tell students how many different crops there are and challenge them to find all of the crops, remind students to look at the plants so they begin to learn the names of each crop.

Allow students to work in teams or solo to find each crop. As they work, check student work and encourage students to help another student when they have completed the map. (Alternately students can water plants or explore with a magnifying glass if they finish early). When all have finished and had time to water, come back together in the garden classroom.

*Explain* **Clarify New Ideas (5 mins):**

Once students are seated again, challenge the class to name as many crops as they can without repeating. Tally a point (or assign a student to tally them) for each crop. Congratulate students for great effort and teamwork. Ask: Each of these crops are growing in what region? In what season? Did anyone find any (out of season crop) growing in the garden? Why not—explain it is not the right season for that crop to grow in our region—why, what's not right (weather conditions, hours of sunlight etc.) These are key components of Seasonality.

*Elaborate* **Observe The Fruits (5 mins):**

If available, harvest a snack from the garden, use the map to describe the location of the mystery snack, and demonstrate how to harvest if needed. Ensure that students sanitize hands and rinse harvest before consuming.

*Evaluate* **Reflect (5 mins):**

Timed pair share or mix pair share: “Name something new you learned today in the garden. It could be new knowledge about the crops we are growing, new vocabulary, or a new skill like map reading or harvesting that you hadn't done before.” To establish an evaluation routine, the following questions can serve as a guide for each lesson.

- What did you enjoy about today's class, what was your favorite part? Did you learn any new information or skills in class today? What could you teach someone based on what we did today?
- Did anything about our class surprise you? Did you learn any new information or skills in class today? What could you teach someone based on what we did today?
- What connections can you make between what we did today and the kitchen?
- How did you or a classmate show a school value or honor our garden agreements?

 ADAPTING FOR INDOORS

- Garden Plan Map-Use the same opening questions, but have students use a simple planting calendar or regional guide to create a garden plan on the map.
- Create collages of seasonal crops or a seasonality guide using images cut from magazines.

## CONNECTIONS TO KITCHEN LESSONS

Use an ingredient list from a recipe from the kitchen as a guide for a scavenger hunt in the garden. Research the source of ingredients that we did not find in the garden, find out if we could grow them and if so when.

## POSSIBLE EXTENSIONS

- Predict how soon different crops will be ready for harvest and create a chart for the Chef Educator so that the produce can be used in the teaching kitchen.
- Research simple recipes or share family recipes that use the seasonal crops.
- Create a seasonal crop bingo board or scavenger hunt for garden visitors.
- Schedule student ambassadors to lead tours of the garden using the map.

## OTHER COMMENTS

A common map of the garden can be very useful for assigning jobs to students and volunteers and setting up observation stations. Collecting and comparing maps of each season can help reinforce the idea of seasonality. Numerous questions and observations about the plants and the stage of their life cycle can take place to build a greater understanding of seasonality as well.