

How should we arrange our garden and plant it?

## **MY OWN FOOD CHAIN PROGRAM (K-2)**

### **Planning the Plot**

**(ILS 7A, 17A)**

#### **Overview**

This curriculum explores the relationship between people and the food they eat. It aims to give children in grades K-2 a basic understanding of the flow of energy through the food chain, and the place of people in the food chain. If teachers complete the entire curriculum, their classes will explore food chains in nature, focusing on its individual links and looking at the flow of energy as a whole. Students will then look at the place of people in the food chain, and discover how people have appropriated nature's systems in agricultural practices – making the food chain our own. Classes will compare traditional and sustainable agricultural practices.

Sustainable Agriculture, for the purpose of this curriculum, shall be defined as "a system of food production, supported by consumers, where farming operations, practices and technologies work in harmony with the natural systems that sustain life on earth."

#### **Suggested Grade Level**

This curriculum is designed for kindergarten through second grade levels. The topics covered can be built upon in complexity throughout that age range.

#### **Approximate Time**

45 minutes.

#### **Objectives**

1. The students will plan and map their garden plot.

#### **Activity Abstract**

In this lesson, students will help choose the plants and arrangement of their garden. They will create a map of the garden, both on paper and life-sized.

#### **Background Information**

Plants that grow fast – and could possibly be planted and harvested before school ends in June – include radishes, arugula and lettuce. Radishes and Lettuce can be put into the ground before the last frost of the year; the others all need to be protected from the frost. Plants can be started indoors, but radishes are difficult to transplant.

Pumpkins need to grow over the summer, but in a year-round school or a situation where parent volunteers can care for the plants, they are relatively easy and fun for kids to harvest.

All in all, the best source of information about seeds is seed packets themselves, which always contain information about where, when and how to plant seeds.

## Materials

- Paper
- Crayons
- Some place on the school yard or at the farm where the class can grow their own garden. The area doesn't need to be big – 10'x10' is plenty.
- Seed packets for planting and background information.

## Procedure (Session 1)

1. **Tap Prior Knowledge.** Ask students if they've ever grown a garden. What did they grow? What do they wish they could grow, if they never had a garden?
2. Ask students to remember all of the things we've learned about plants and food chains recently. How could this information help us if we want to grow our own vegetables in a class garden?
3. **Introduce (scientific) principle.** Explain, today we're going to plan our class garden. First, let's see what we're planning.
4. Go out to garden site. Look at it and ask questions of the kids... is it sunny or shady? What shape is it? If the kids are old enough, measure the site (write down data).
5. Return to classroom. Review the crop diversity lesson and remind the kids that we want many types of plants in our garden because of what we learned there.
6. **Hands-on experience.** Have kids brainstorm vegetables that they'd like to grow.
7. Help them choose several vegetables to grow based on desires and how easy and hard they are to grow (see background information and seed packets). Write list of plants on board (draw for kindergarteners).
8. Draw the garden on the board (outline shape). Have each student do the same on a piece of paper.
9. Explain that each student should draw a map of the garden with their vision of which plants should grow where. Their map should have a key/legend that shows a symbol for each type of plant. (Fences, etc. too?) Use colors for fun and visual stimulation. If kids are old enough, use rulers to have a scale.
10. Display pictures. Have kids vote for their favorite layout but they can't vote for their own.
11. **Relate concept and activity.** Draw "winning" picture on board.
12. Go back outside to garden. Try to make a "living map" in the garden by having children play the roles of plants. They can hold signs with the plant names on it and should stand in the right place according to the map. Have everyone look at the map and approve.
13. **Conclusion/Wrap-up.** Explain that now that we have a plan for the garden, we will have to have a plan of action. Ask the students to think more about what goes into growing a garden for next time.

## Extensions (optional)

This lesson works best when it accompanies a map unit, in which students learn to read maps, understand legends and symbols, etc.

## **References**

<http://www.backyardgardener.com/veg/indexkitchen.html> really good info on planning and spacing plants.

<http://muextension.missouri.edu/xplor/agguides/hort/g06201.htm> click on the vegetable to learn how long it takes to grow and how far apart to plant them and everything else.