

# Plan To Plant

Maine Learning Results: Math:M1, B1; Science:B1, J1

## Key Concepts:

- Read seed packets and determine how to plant and grow a vegetable
- Observe and compare seeds from various vegetables
- Plant seeds according to planting instructions
- Illustrate a planting plan of their own garden (extension activity)

## Activity:

- Explain to the class that one way to eat Maine grown foods is to grow a garden at home! Growing a garden is easy and fun to do with family and friends. Ask students what a garden needs to be successful (soil, water, sun, air – and a little love!). Today they are going to practice planting and planning a garden of their own. Hopefully they can take the methods home and begin planning their own garden over the winter, and build and plant it in the spring.
- Explain that the class will work in groups, and that each group will receive a packet (or photocopy with front and back of packet) of a different type of seed. There are instructions on the back of each packet which help gardeners plant seeds and grow plants. As a group, use the worksheet (provided on page 26) to answer questions about your vegetable. Please do not open the seed packets yet; we will do this soon!
- Divide the class into six equal groups. Distribute seed packets (or photocopies) and worksheets. Ask students if they are familiar with or have guesses about the key words on the seed packets. Then review the following vocabulary, which will help students complete their answers as the work in groups. (Note – other seed packet may have different vocabulary; review words appropriate to your packets.)

Sow – To plant, or place seeds in the ground. Germinate – To sprout, or begin to grow. Thin – To remove seeds once they have germinated to reduce overcrowding to provide enough space for plants to grow.

- Review worksheet answers as a class. How did answers vary between different types of vegetables?
- Tell students they are now going to plant their seeds, using the directions on the back of the seed packets (or photocopies). Distribute plastic tubs filled with soil.
- Use one type of seed, such as a carrot seed, to demonstrate. Show students the seed and make observations. Is this what they thought a carrot seed would look like? Read aloud the planting/sowing directions on your seed packet and show students how to properly plant your seeds in your plastic tub.
- Have students open their seed packets (or distribute seeds in baggies). Each group should show their seed to the class, and make observations. How does this seed compare to the seed you had? Does it look the way they thought it would? Does it look like a vegetable they've eaten, or part of a familiar vegetable? How do the sizes compare? (Many more

observations can be made – keep them coming! Some students may have never seen a seed before, so this could be a new experience for them.)

- Have students follow the planting directions on their seed packets to try and “plant” their seeds in the plastic tubs. Encourage the class to share how they planted their seeds in contrast to other groups.
- Have one student from each group bring their tub to the front and assemble all the tubs into one garden with many vegetables. Look how easy it was to plant a garden! Ask students if their plants are in a good location compared to the other plants – how far away were they supposed to be from other plants? If time permits, measure how far away each should be from the other depending on the planting instructions.
- Conclude the lesson by asking students about how to plant their seeds, if all seeds look the same, and what it takes to grow a garden. Do any students plan on planning and planting a garden with their family this spring? Eating locally grown food is important, and you can't get more local than walking into your backyard to get your food. You can also go to a local farm stand or farmers' market to purchase locally grown foods if you don't have a garden or want a different food not grown in your garden (or if you want more!).

**Materials:** Space to record student responses 7 large plastic tubs, about 12" deep Potting soil filled about ½ way in each tub 7 or more seed packets for various vegetables, or photocopies of front/back of seed packet and baggies with the corresponding seeds. Try to have one real seed packet so students can see it. You may be able to get free seed packets of old seeds at Fedco or Johnny's if you explain they are not needed for germinating, just for teaching purposes. Student worksheets (provided) Graph paper and pencils (optional, for extension activity)

Time: 30 minutes

### **Follow Up Activities:**

- Use graph paper so students can plan an entire garden, incorporating scale and the planting directions of various vegetables. How far should they space each plant, and how big will the entire garden need to be? Perhaps they'd like two or more gardens!
- Explore the concept of companion planting, including using natural means to deter pests (ex. planting marigolds with tomato plants).
- Research the locations of local farm stands and farmers' markets. Use [www.getrealmaine.com](http://www.getrealmaine.com) or [www.mainefoods.net](http://www.mainefoods.net) as resources. Generate a list, or use a local map to mark the locations in comparison to students' houses, the school, the local grocery store, etc. Measure distances. Is the farm stand closer to the students' home than the grocery? Talk about transportation to the grocery versus the farm stand versus your backyard garden. What energy is used? Are any foods in the grocery locally grown? Do all products at the farm stand come from the farm? You can even calculate fuel costs or other transportation costs.