



CROP HARVEST CHARTING

Grade Level: Grade 4

Description

In this activity students will use “days to harvest” times to chart approximate planting and harvesting times of vegetables to be grown in the school garden. Charting out crops in this way can give you a visual reference as to what will be in the garden growing at a given date, what will be ready to eat when, and also when you need to plant things in order for them to be ready at a given date.

Note: this is a simplified activity about crop timing. There are many other factors to take into account when planting crops - see the MAC How-to-Guide on “Selecting the Crops” to review.

Guiding Question

What is a seed catalog? Do you have any idea how long it takes a vegetable to grow from a seed into the fruit or vegetable that we eat? How many days in a week? Weeks in a month? How can we represent time in a graph? Why might a visual graph of our garden be helpful for us and other people in the school?

Big Ideas

Vegetables plants vary in the number of days required from planting to harvest. Harvest time is when the part of the plant we want to eat is ready.

Learning Objectives

To be able to chart vegetable planting and harvest times on a chart. To be able to translate days into months, and represent each vegetable’s required time from planting to harvest on a chart to scale.

Materials

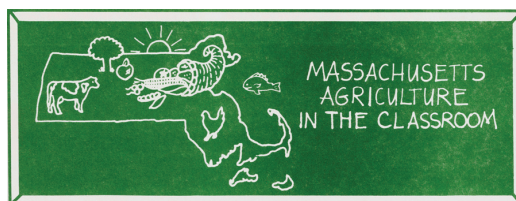
- Seed catalogs
- Paper
- Rulers
- Pencils

Preparation

Gather as many vegetable seed catalogs geared for your climate as possible. Many current catalogs are free, and you can also write away and request ones from past years for free.

Lesson supported by a Specialty Crops Grant from the Massachusetts Department of Agricultural Resources.





Introducing the Lesson

Explain that you will be learning about crop charting, and creating a garden planting plan for the school garden. Introduce a seed catalog and show them what information they will be looking for: days to harvest, and when it can be planted outside.

Activate prior knowledge: What is a seed catalog? How many weeks in a month?

Engage Student Interest: Farmers do this kind of crop planning every year, to figure out how to have crops ready for us to eat. We could plan in this way to have certain vegetables ready for certain dates. (e.g. a fall harvest celebration)

Procedure: Total time approximately a hour.

1. Have students chart out May through October on graph paper, deciding what unit of time the squares will represent. (Starting simple by using each square to represent one week usually works well.)
2. Now, go through the seed catalogs and find garden vegetables that you might want to plant. How many is at your discretion. If possible use vegetables you have previously selected that you will grow in your garden, to make this activity more meaningful.
3. Have students note down their vegetables and how many days to harvest from their research in the seed catalogs.
4. Have students translate their days to harvest into approximate weekly increments.
5. Using their monthly schedules, chart out horizontally each vegetables growing time, from seeding time to harvest. (See example below)

Wrap Up and Assessing Student Knowledge

Why might this be a useful thing for farmers to do? How could it be helpful to us in our school garden?

- * **MA Department of Education Standards in this lesson ***
- * **Life science 3. Recognize that plants and animals go through life cycles.**
- * **Math: Measurement and Data 1, 2, 4**

Extensions:

Instead of drawing the vegetable's required weeks to harvest directly on a chart, have students cut out the squares representing the appropriate number of weeks on larger graph paper. Using a month chart as a class, do more research on the vegetables to determine how you want to position their growth to harvest time window within the growing season.

E.g. your class might want to position the 4 week period of a radish starting in May so that they can eat it before school gets out, or in September for a fall harvest. Arranging your vegetables this way can give you a sense of what will be ready to eat when.

Please visit the Massachusetts Agriculture in the Classroom website at www.aginclassroom.org to tell us how you used this Garden-Based Lesson

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