



## Measurement – Inch by Inch, Row by Row

### Goal

Students will determine the space needed to grow the vegetables for a soup recipe. They will then make the soup using seasonal ingredients from a local farm as an optional extension activity.

### NC Common Core

Third: *Mathematics* – 3.MD.6, 3.MD.7; *English Language Arts* – RI.3.5, RI.3.4, RI.3.7

Fourth: *Mathematics*– 4.NF.5; *English Language Arts*– RI.4.1, RI.4.7

Fifth: *Mathematics* – 5.NF.4, 5.OA.1, 5.OA.2; *English Language Arts* – RI.5.6, RI.5.7, W.5.2

### Materials

#### **Books to Read**

Local Farms and Sustainable Foods by Julia Vogel

Who Grew My Soup? by Tom Darbyshire

Saving Strawberry Farm by Deborah Hopkinson

#### **Supplies for each group**

Seed catalogue with planting instructions and yield information

Access to the Internet

Scale

One of each vegetable:

Potato

Carrot

Onion

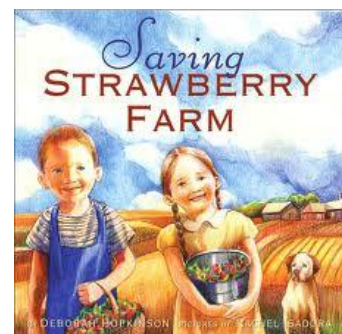
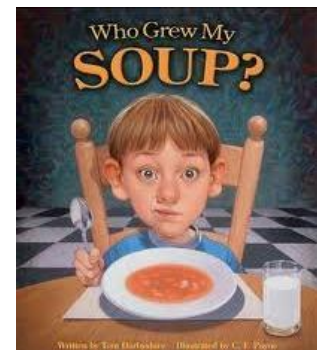
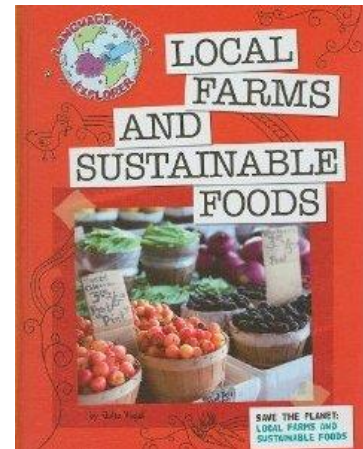
Tomato

Green Bean

### Activities

#### **Read a book**

Make the books Local Farms and Sustainable Food, Who Grew My Soup, and Saving Strawberry Farm available to students.





### **Procedure**

The class will be “growing” vegetable soup. The students will have to figure out how much of each vegetable to grow and how much space will be needed in order to make the soup recipe. You may want to demonstrate how to use the scale for weighing produce. Instruct students to use the seed catalogs and the Internet to calculate the average yield of each vegetable per square foot. Explain to students how to fill in the chart on the student worksheet and double check that they understand how to calculate how many of each vegetable they will need to prepare their soup.

### **Extension (optional): Make the Soup!**

#### **Ingredients and Materials**

3 lbs. potatoes	Large pot
2 lbs. of carrots	Large spoon
1 lb. onion	Measuring cups
½ lb. green beans	Measuring spoons
2 lbs. tomato	Large bowl
8 bouillon cubes	Hot plate
10 cups water	Sharp knife
3 bay leaves	
½ cup parsley, chopped	
2 tsp. dried marjoram	
2 tsp. dried thyme	
Salt and pepper	

### **Instructions**

It is very important to review knife safety with students before proceeding. Students will slice onion and carrots into rounds. Cut potato into cubes. Cut beans into 1 inch pieces. Put in a large cooking pot. Set aside. Students will chop tomatoes into eighths. Put in a bowl. Set aside. Students will add bouillon cubes and water to cooking pot with vegetables. Teacher will be responsible for using the hot plate. Bring to boil.

Reduce heat to medium low and simmer, uncovered, about 10 minutes. Make sure students do not linger around the hot plate. Students will add tomatoes. Add herbs. Stir. Bring back to a simmer. Simmer, uncovered, about 30 minutes, until vegetables are crisp-tender.