

# HARVEST of the MONTH in the CLASSROOM



## CARROTS

### HISTORY

Carrots originated in Central Asia over 1,000 years ago and were derived from a wild carrot called Queen Anne's Lace. This wild carrot ancestor is also a taproot crop but has a white root. Archaeologists have found wild carrot seeds in Europe that were 5000 years old! The carrots we know today, orange and more uniform in size and shape, have been selectively bred over centuries from earlier carrots that were purple and yellow, and sometimes white. Today the largest producers of carrots are China, the United States, Poland, Japan, and France.

### FUN FACTS

• People in the United States eat an average of 10 pounds of carrots every year.

• Carrot seeds are tiny. There are more than 23,000 seeds in one ounce.

• The earliest versions of carrots were white and purple.

• Cultivated carrots originated in Afghanistan.

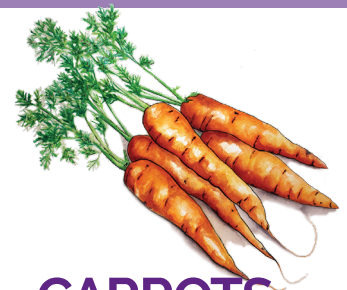
### FARMER BIO



The Athearn Family at Morning Glory Farm on the island of Martha's Vineyard farms 144 acres. They grow a wide variety of vegetables from Asparagus to Zucchini, hay and meat. Simon Athearn's favorite carrot variety is Bolero because it is thick, not overly long, can withstand cold and has the best carrot flavor of any carrot he's ever grown. All of Morning Glory Farm's products are sold through their farm store and local restaurants. *Photo Credit: Alison Shaw / Morning Glory Farm.*

# CARROT SEED TAPE

Grades 3-5 • 30 minutes



## CARROTS

### OBJECTIVES

Measure carrot seed spacing. Use a ruler appropriately. Do simple math calculations.

### ESSENTIAL QUESTIONS

How do we space plants in the garden? Why is this important? How do farmers measure things?

### MA STATE FRAMEWORK(S)

3rd-5th Math Standards

- 3.NF
- 3.MD
- 4.OA A.
- 4.MD A. unit.
- 5.MD A

### MATERIALS NEEDED

Rulers  
Newspaper  
Water and flour  
Carrot seeds (pelletized are easiest)  
Paint brush, optional

## PROCEDURE

### Introduction

Have students stand in a big circle. Tell them to take one step forward, and step closer and closer, until they are standing very close. Now tell everyone to slowly and carefully try to spread their hands up to the sky. Is it easy or difficult? Now have them take five big steps backwards and try to reach up to the sky now. Is it easier? Tell them that plants need space to stretch out just like we do. When planting carrots you want to give each plant (depending on the variety) about an inch of space to start growing.

### Activity

Send each student back to their desk (or garden spot) with a ruler and piece of newspaper. Show them an example of a 2" wide strip the length of the newspaper (about 1-2 feet long is good). They are going to need enough room to place the seed and fold over the newspaper horizontally. First, have everyone line up their ruler and newspaper strip and put an 'x' with a pencil for every inch. This is where you are going to glue on the seeds. Once the strips are labeled, students will attach seeds to newspaper strips with a flour & water "glue."

### Seed "Glue" Recipe

1. Mix equal parts flour & water
2. Place in small cups or bowls

Have students use their finger or a paintbrush to put a dab of "glue" where each 'x' is and then attach one carrot seed. Continue until all of the 'x's have seeds attached. Now fold the newspaper in half lengthwise so the seeds are sandwiched between the paper and use some more of the flour mixture to glue it shut. This will keep the seeds from falling off or out of place.

Let the strips dry for 24 hours. When you are ready, dig a shallow trench to plant the entire strip and cover lightly with soil. Water regularly and enjoy perfectly spaced carrots!

### Wrap Up

Ask students why it is important to give seeds space. How much space do carrot seeds need?

Lessons developed in partnership with:  
[Island Grown Initiative](http://www.islandgrown.org)