



# standards based curriculum

Materials to inspire your USDA Fresh Fruit & Vegetable Program

## PLANTING SEEDS

Students practice their measuring (and multiplication) skills to plan and prepare seeds for planting by making seed tape that can be saved and then later directly planted in the ground.

### Primary & Intermediate Grades

Time: 30 minutes

### Before you begin...

#### Gather materials

- FFV snack
- Roll of toilet paper
- Markers
- Rulers (optional, depending on skills you want students to develop)
- Common Seeds Spacing Chart from High Mowing Seeds found here: <https://www.highmowingseeds.com/pub/media/wysiwyg/pdf/2017%20Planting%20Chart.pdf>
- Packets of seeds (ideally from the FFV you are tasting, or carrot, beet or other seeds), enough so each student can “plant” at least 5-10 seeds
- Paste (made with flour and water in a ratio of 2:1, such as 2T flour to 1T water - you don't want to paste to be too watery or it will begin the seed germination process)
- Baggies (for students to take home their seed tapes)
- Fun facts & information about FFV

### Instructions

1. Distribute today's FFV snack and allow students to eat it while you teach the mini-lesson.
2. Ask students who has gardened. Invite students to share some of the activities they have done in the garden (such planting, weeding, harvesting, tasting, digging, etc.).
3. Bring students' attention to the practice of planting seeds. Ask what they know about how this process works. Talk about plants' needs for sun, water, air, soil, and space. Lead students to think about spacing of seeds and the need for space so the plant can grow.



## PLANTING SEEDS CONT...

4. Explain that today students will use their measurement skills to create seed tape, which can be planted directly in the garden. If you are using rulers, review with students how to use a ruler.
5. Show students the seed packet. Invite a student to locate the plant spacing information, or show students if they do not know where to locate this information. On your board, draw a long rectangle. Invite a student to use a ruler to show you how mark dots at that spacing. For example if you are using carrot seeds, have the student make a dot every 1" (1 ½", or 2"). To raise the level of challenge, have student mark seeds spacing incrementally at 1 ½" (1 ½", 3", 4 ½", etc.). If your students are familiar with multiplication, have them calculate how many seeds would fit in 1', etc.
6. Show students the toilet paper. Explain that today you will be using this biodegradable paper for a different use! Tear off a strip of paper (1' -2') and show students how to fold it in half lengthwise and lightly crease it. Then unfold it.
7. Distribute materials. Show students how to measure and mark the spacing on the toilet paper. Then, show students how to use a small dab of paste, topped with a seed.
8. Once students have finished their seed tapes, allow them to dry completely before rolling them up and placing them in baggies to store until planting time.

### Extension

Follow up this activity with a trip to the school garden to plant your seed tapes. Keep track of the number of seeds on the tape, the number that germinate, and the number that grow and explore ratios and yield.

### Standards Alignment

#### CCSS.MATH.MD.A Measure lengths

#### CCSS Math Practices

- MP1. Make sense of problems and persevere in solving them.
- MP4. Model with mathematics.
- MP5. Use appropriate tools strategically.
- MP6. Attend to precision.
- MP7. Look for and make use of structure.
- MP8. Look for and express regularity in repeated reasoning.